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Goddard, Audrey
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Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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 aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250
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<210> 6

<211> 322

<212> PRT

<213> Homo Sapien

<400> 6

Met	Ala	Arg	Cys	Phe	Ser	Leu	Val	Leu	Leu	Leu	Thr	Ser	Ile	Trp
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Thr	Thr	Arg	Leu	Leu	Val	Gln	Gly	Ser	Leu	Arg	Ala	Glu	Glu	Leu
			20						25					30
Ser	Ile	Gln	Val	Ser	Cys	Arg	Ile	Met	Gly	Ile	Thr	Leu	Val	Ser
			35						40					45
Lys	Lys	Ala	Asn	Gln	Gln	Leu	Asn	Phe	Thr	Glu	Ala	Lys	Glu	Ala
			50						55					60
Cys	Arg	Leu	Leu	Gly	Leu	Ser	Leu	Ala	Gly	Lys	Asp	Gln	Val	Glu
			65						70					75
Thr	Ala	Leu	Lys	Ala	Ser	Phe	Glu	Thr	Cys	Ser	Tyr	Gly	Trp	Val
			80						85					90
Gly	Asp	Gly	Phe	Val	Val	Ile	Ser	Arg	Ile	Ser	Pro	Asn	Pro	Lys
			95						100					105
Cys	Gly	Lys	Asn	Gly	Val	Gly	Val	Leu	Ile	Trp	Lys	Val	Pro	Val
			110						115					120
Ser	Arg	Gln	Phe	Ala	Ala	Tyr	Cys	Tyr	Asn	Ser	Ser	Asp	Thr	Trp
			125						130					135

Thr Asn Ser Cys	Ile Pro Glu Ile Ile	Thr Thr Lys Asp Pro	Ile
140		145	150
Phe Asn Thr Gln	Thr Ala Thr Gln Thr	Thr Glu Phe Ile Val	Ser
155		160	165
Asp Ser Thr Tyr	Ser Val Ala Ser Pro	Tyr Ser Thr Ile Pro	Ala
170		175	180
Pro Thr Thr Thr	Pro Pro Ala Pro Ala	Ser Thr Ser Ile Pro	Arg
185		190	195
Arg Lys Lys Leu	Ile Cys Val Thr Glu	Val Phe Met Glu Thr	Ser
200		205	210
Thr Met Ser Thr	Glu Thr Glu Pro Phe	Val Glu Asn Lys Ala	Ala
215		220	225
Phe Lys Asn Glu	Ala Ala Gly Phe Gly	Gly Val Pro Thr Ala	Leu
230		235	240
Leu Val Leu Ala	Leu Leu Phe Phe Gly	Ala Ala Ala Gly Leu	Gly
245		250	255
Phe Cys Tyr Val	Lys Arg Tyr Val Lys	Ala Phe Pro Phe Thr	Asn
260		265	270
Lys Asn Gln Gln	Lys Glu Met Ile Glu	Thr Lys Val Val Lys	Glu
275		280	285
Glu Lys Ala Asn	Asp Ser Asn Pro Asn	Glu Glu Ser Lys Lys	Thr
290		295	300
Asp Lys Asn Pro	Glu Glu Ser Lys Ser	Pro Ser Lys Thr Thr	Val
305		310	315
Arg Cys Leu Glu	Ala Glu Val		
320			

<210> 7
 <211> 2586
 <212> DNA
 <213> Homo Sapien

<400> 7
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 ccgcagcgca actcggtcca gtcggggcg ggcgtgcggg cgcagagcgg 150
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 tctctcagca cagcctgggg aggggggtcat tgttctcctc gtccatcagg 1850
 gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900
 gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtctt 1950
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<210> 8

<211> 350

<212> PRT

<213> Homo Sapien

<400> 8

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Ala	Val	Pro	Thr	Ala	Pro	Ala	Pro	Ala	Pro	Thr	Ala	Thr	Ser	Ala
				20					25					30
Pro	Val	Lys	Pro	Gly	Pro	Ala	Leu	Ser	Tyr	Pro	Gln	Glu	Glu	Ala
				35					40					45
Thr	Leu	Asn	Glu	Met	Phe	Arg	Glu	Val	Glu	Glu	Leu	Met	Glu	Asp
				50					55					60
Thr	Gln	His	Lys	Leu	Arg	Ser	Ala	Val	Glu	Glu	Met	Glu	Ala	Glu
				65					70					75
Glu	Ala	Ala	Ala	Lys	Ala	Ser	Ser	Glu	Val	Asn	Leu	Ala	Asn	Leu

80					85					90				
Pro	Pro	Ser	Tyr	His	Asn	Glu	Thr	Asn	Thr	Asp	Thr	Lys	Val	Gly
				95					100					105
Asn	Asn	Thr	Ile	His	Val	His	Arg	Glu	Ile	His	Lys	Ile	Thr	Asn
				110					115					120
Asn	Gln	Thr	Gly	Gln	Met	Val	Phe	Ser	Glu	Thr	Val	Ile	Thr	Ser
				125					130					135
Val	Gly	Asp	Glu	Glu	Gly	Arg	Arg	Ser	His	Glu	Cys	Ile	Ile	Asp
				140					145					150
Glu	Asp	Cys	Gly	Pro	Ser	Met	Tyr	Cys	Gln	Phe	Ala	Ser	Phe	Gln
				155					160					165
Tyr	Thr	Cys	Gln	Pro	Cys	Arg	Gly	Gln	Arg	Met	Leu	Cys	Thr	Arg
				170					175					180
Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp	Gly	His	Cys
				185					190					195
Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn
				200					205					210
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly
				215					220					225
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu
				230					235					240
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu
				245					250					255
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly
				260					265					270
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys
				275					280					285
Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	Asp	Gly	Glu	Ile	Leu	Leu
				290					295					300
Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu
				305					310					315
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu
				320					325					330
Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu	Leu
				335					340					345
Gly	Gly	Glu	Glu	Ile										
				350										

<210> 9

<211> 1395
<212> DNA
<213> Homo Sapien

<400> 9
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ttcaatctgc aaatctatgg ggtcctgggg ctctttctgga cccttaactg 200
gggtactggcc ctggggccaat gcgtcctcgc tggagccttt gcctccttct 250
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gaggcaggag aatcgcttga acccgggagg cagaggttgc agtgagccga 1300

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aaacaaacaa acaaaaagat tttattaaag atattttgtt aactc 1395

<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

Arg	Thr	Arg	Gly	Arg	Thr	Arg	Gly	Gly	Cys	Glu	Lys	Val	Pro	Ile
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Asn	Thr	Ser	Cys	Asn	Pro	Thr	Ala	His	Leu	Val	Asn	Ser	Ser	Cys
				20					25					30
Pro	Gly	Leu	Met	Cys	Val	Phe	Gln	Gly	Tyr	Ser	Ser	Lys	Gly	Leu
				35					40					45
Ile	Gln	Arg	Ser	Val	Phe	Asn	Leu	Gln	Ile	Tyr	Gly	Val	Leu	Gly
				50					55					60
Leu	Phe	Trp	Thr	Leu	Asn	Trp	Val	Leu	Ala	Leu	Gly	Gln	Cys	Val
				65					70					75
Leu	Ala	Gly	Ala	Phe	Ala	Ser	Phe	Tyr	Trp	Ala	Phe	His	Lys	Pro
				80					85					90
Gln	Asp	Ile	Pro	Thr	Phe	Pro	Leu	Ile	Ser	Ala	Phe	Ile	Arg	Thr
				95					100					105
Leu	Arg	Tyr	His	Thr	Gly	Ser	Leu	Ala	Phe	Gly	Ala	Leu	Ile	Leu
				110					115					120
Thr	Leu	Val	Gln	Ile	Ala	Arg	Val	Ile	Leu	Glu	Tyr	Ile	Asp	His
				125					130					135
Lys	Leu	Arg	Gly	Val	Gln	Asn	Pro	Val	Ala	Arg	Cys	Ile	Met	Cys
				140					145					150
Cys	Phe	Lys	Cys	Cys	Leu	Trp	Cys	Leu	Glu	Lys	Phe	Ile	Lys	Phe
				155					160					165
Leu	Asn	Arg	Asn	Ala	Tyr	Ile	Met	Ile	Ala	Ile	Tyr	Gly	Lys	Asn
				170					175					180
Phe	Cys	Val	Ser	Ala	Lys	Asn	Ala	Phe	Met	Leu	Leu	Met	Arg	Asn
				185					190					195
Ile	Val	Arg	Val	Val	Val	Leu	Asp	Lys	Val	Thr	Asp	Leu	Leu	Leu
				200					205					210
Phe	Phe	Gly	Lys	Leu	Leu	Val	Val	Gly	Gly	Val	Gly	Val	Leu	Ser
				215					220					225
Phe	Phe	Phe	Phe	Ser	Gly	Arg	Ile	Pro	Gly	Leu	Gly	Lys	Asp	Phe
				230					235					240

Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser	
				245					250					255	
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe	
				260					265					270	
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu	
				275					280					285	
Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys	
				290					295					300	
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp	
				305					310					315	
Asn	Lys	Lys	Arg	Lys	Lys										
				320											

<210> 11
 <211> 1901
 <212> DNA
 <213> Homo Sapien

<400> 11
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ctgagtctct aagacttttt ctaataaaca agccagtgcg tgtaaaaaaa 1900

a 1901

<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

Met	Gly	Ala	Cys	Leu	Gly	Ala	Cys	Ser	Leu	Leu	Ser	Cys	Ala	Ser
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Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Ile	Leu	Cys	Ser	Cys	Cys	Pro
				20				25					30	

Ala	Ser	Arg	Asn	Ser	Thr	Val	Ser	Arg	Leu	Ile	Phe	Thr	Phe	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35					40					45				
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly
				50					55					60
Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly
				65					70					75
Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser
				80					85					90
Leu	Leu	Gly	Tyr	Arg	Ala	Val	Tyr	Arg	Met	Cys	Phe	Ala	Thr	Ala
				95					100					105
Ala	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val
				110					115					120
Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe
				125					130					135
Phe	Lys	Phe	Leu	Ile	Leu	Val	Gly	Leu	Thr	Val	Gly	Ala	Phe	Tyr
				140					145					150
Ile	Pro	Asp	Gly	Ser	Phe	Thr	Asn	Ile	Trp	Phe	Tyr	Phe	Gly	Val
				155					160					165
Val	Gly	Ser	Phe	Leu	Phe	Ile	Leu	Ile	Gln	Leu	Val	Leu	Leu	Ile
				170					175					180
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu
				185					190					195
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr
				200					205					210
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe
				215					220					225
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe
				230					235					240
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala
				245					250					255
Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu
				260					265					270
Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser
				275					280					285
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro
				290					295					300
Thr	Gln	Leu	Gly	Asn	Glu	Thr	Val	Val	Ala	Gly	Pro	Glu	Gly	Tyr
				305					310					315
Glu	Thr	Gln	Trp	Trp	Asp	Ala	Pro	Ser	Ile	Val	Gly	Leu	Ile	Ile

320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser	Leu Arg Ser Ser Asp	His
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr	Glu Glu Cys Pro Pro	Met
350	355	360
Leu Asp Ala Thr Gln Gln Gln Gln Gln	Gln Val Ala Ala Cys	Glu
365	370	375
Gly Arg Ala Phe Asp Asn Glu Gln Asp	Gly Val Thr Tyr Ser	Tyr
380	385	390
Ser Phe Phe His Phe Cys Leu Val Leu	Ala Ser Leu His Val	Met
395	400	405
Met Thr Leu Thr Asn Trp Tyr Lys Pro	Gly Glu Thr Arg Lys	Met
410	415	420
Ile Ser Thr Trp Thr Ala Val Trp Val	Lys Ile Cys Ala Ser	Trp
425	430	435
Ala Gly Leu Leu Leu Tyr Leu Trp Thr	Leu Val Ala Pro Leu	Leu
440	445	450
Leu Arg Asn Arg Asp Phe Ser		
455		

<210> 13
 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 13
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 tgaaccacct gccagaagac atggagaacg ctctcaccgg gagccagagc 150
 tcccatgctt ctctgcgcaa tatccattcc atcaaccca cacaactcat 200
 ggccaggatt gagtcctatg aaggaaggga aaagaaaggc atatctgatg 250
 tcaggaggac tttctgtttg tttgtcacct ttgacctctt attcgtaaca 300
 ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350
 agagaaggag gtgatgcagt atgactacta ttcttcatat tttgatatat 400
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 tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500
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 ggcaaaaaga ggcaggcagt ggagtctccc tgtcgacagt aaagttgaaa 900
 tggtgacgtc cactgctggc tttattgaac agctaataaa gatttattta 950
 ttgtaatacc tcacaaacgt tgtaccatat ccatgcacat ttagttgcct 1000
 gcctgtggct ggtaaggtaa tgtcatgatt catcctctct tcaagtgagac 1050
 tgagcctgat gtgttaacaa ataggtgaag aaagtcttgt gctgtattcc 1100
 taatcaaaag acttaatatata ttgaagtaac acttttttag taagcaagat 1150
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 gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450
 tctctgattg ttctgaaatg ttctaaatac tcttattttg aatgcacaaa 1500
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<210> 14

<211> 234

<212> PRT

<213> Homo Sapien

<400> 14

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Gln	Ser	Ser	His	Ala	Ser	Leu	Arg	Asn	Ile	His	Ser	Ile	Asn	Pro
			20					25					30	
Thr	Gln	Leu	Met	Ala	Arg	Ile	Glu	Ser	Tyr	Glu	Gly	Arg	Glu	Lys
			35					40					45	
Lys	Gly	Ile	Ser	Asp	Val	Arg	Arg	Thr	Phe	Cys	Leu	Phe	Val	Thr

50					55					60				
Phe	Asp	Leu	Leu	Phe	Val	Thr	Leu	Leu	Trp	Ile	Ile	Glu	Leu	Asn
				65					70					75
Val	Asn	Gly	Gly	Ile	Glu	Asn	Thr	Leu	Glu	Lys	Glu	Val	Met	Gln
				80					85					90
Tyr	Asp	Tyr	Tyr	Ser	Ser	Tyr	Phe	Asp	Ile	Phe	Leu	Leu	Ala	Val
				95					100					105
Phe	Arg	Phe	Lys	Val	Leu	Ile	Leu	Ala	Tyr	Ala	Val	Cys	Arg	Leu
				110					115					120
Arg	His	Trp	Trp	Ala	Ile	Ala	Leu	Thr	Thr	Ala	Val	Thr	Ser	Ala
				125					130					135
Phe	Leu	Leu	Ala	Lys	Val	Ile	Leu	Ser	Lys	Leu	Phe	Ser	Gln	Gly
				140					145					150
Ala	Phe	Gly	Tyr	Val	Leu	Pro	Ile	Ile	Ser	Phe	Ile	Leu	Ala	Trp
				155					160					165
Ile	Glu	Thr	Trp	Phe	Leu	Asp	Phe	Lys	Val	Leu	Pro	Gln	Glu	Ala
				170					175					180
Glu	Glu	Glu	Asn	Arg	Leu	Leu	Ile	Val	Gln	Asp	Ala	Ser	Glu	Arg
				185					190					195
Ala	Ala	Leu	Ile	Pro	Gly	Gly	Leu	Ser	Asp	Gly	Gln	Phe	Tyr	Ser
				200					205					210
Pro	Pro	Glu	Ser	Glu	Ala	Gly	Ser	Glu	Glu	Ala	Glu	Glu	Lys	Gln
				215					220					225
Asp	Ser	Glu	Lys	Pro	Leu	Leu	Glu	Leu						
				230										

<210> 15
 <211> 2768
 <212> DNA
 <213> Homo Sapien

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 ccgcctcccg ggacagaaga tgtgctccag ggtccctctg ctgctgccgc 150
 tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200
 tgccagtgc gccagccaca gacagtcttc tgactgccc gccaggggac 250
 cacggtgcc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300
 agaacggcat caccatgctc gacgcaggca gctttgccgg cctgcccggc 350

ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400
 ggtcttccag ccactcgcca acctcagcaa cctggacctg acggccaaca 450
 ggctgcatga aatcaccaat gagaccttcc gtggcctgcg gcgcctcgag 500
 cgctcttacc tgggcaagaa cgcctccgc caccatccagc ctggtgcctt 550
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 tgccacttcc cgccaagaa cgtgggccgg ctgctcctgg agcttgacta 1150
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<210> 16

<211> 673

<212> PRT

<213> Homo Sapien

<400> 16

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Ala	Leu	Gly	Pro	Gly	Val	Gln	Gly	Cys	Pro	Ser	Gly	Cys	Gln	Cys
				20					25					30

Ser	Gln	Pro	Gln	Thr	Val	Phe	Cys	Thr	Ala	Arg	Gln	Gly	Thr	Thr
				35					40					45

Val	Pro	Arg	Asp	Val	Pro	Pro	Asp	Thr	Val	Gly	Leu	Tyr	Val	Phe	50	55	60
Glu	Asn	Gly	Ile	Thr	Met	Leu	Asp	Ala	Gly	Ser	Phe	Ala	Gly	Leu	65	70	75
Pro	Gly	Leu	Gln	Leu	Leu	Asp	Leu	Ser	Gln	Asn	Gln	Ile	Ala	Ser	80	85	90
Leu	Pro	Ser	Gly	Val	Phe	Gln	Pro	Leu	Ala	Asn	Leu	Ser	Asn	Leu	95	100	105
Asp	Leu	Thr	Ala	Asn	Arg	Leu	His	Glu	Ile	Thr	Asn	Glu	Thr	Phe	110	115	120
Arg	Gly	Leu	Arg	Arg	Leu	Glu	Arg	Leu	Tyr	Leu	Gly	Lys	Asn	Arg	125	130	135
Ile	Arg	His	Ile	Gln	Pro	Gly	Ala	Phe	Asp	Thr	Leu	Asp	Arg	Leu	140	145	150
Leu	Glu	Leu	Lys	Leu	Gln	Asp	Asn	Glu	Leu	Arg	Ala	Leu	Pro	Pro	155	160	165
Leu	Arg	Leu	Pro	Arg	Leu	Leu	Leu	Leu	Asp	Leu	Ser	His	Asn	Ser	170	175	180
Leu	Leu	Ala	Leu	Glu	Pro	Gly	Ile	Leu	Asp	Thr	Ala	Asn	Val	Glu	185	190	195
Ala	Leu	Arg	Leu	Ala	Gly	Leu	Gly	Leu	Gln	Gln	Leu	Asp	Glu	Gly	200	205	210
Leu	Phe	Ser	Arg	Leu	Arg	Asn	Leu	His	Asp	Leu	Asp	Val	Ser	Asp	215	220	225
Asn	Gln	Leu	Glu	Arg	Val	Pro	Pro	Val	Ile	Arg	Gly	Leu	Arg	Gly	230	235	240
Leu	Thr	Arg	Leu	Arg	Leu	Ala	Gly	Asn	Thr	Arg	Ile	Ala	Gln	Leu	245	250	255
Arg	Pro	Glu	Asp	Leu	Ala	Gly	Leu	Ala	Ala	Leu	Gln	Glu	Leu	Asp	260	265	270
Val	Ser	Asn	Leu	Ser	Leu	Gln	Ala	Leu	Pro	Gly	Asp	Leu	Ser	Gly	275	280	285
Leu	Phe	Pro	Arg	Leu	Arg	Leu	Leu	Ala	Ala	Ala	Arg	Asn	Pro	Phe	290	295	300
Asn	Cys	Val	Cys	Pro	Leu	Ser	Trp	Phe	Gly	Pro	Trp	Val	Arg	Glu	305	310	315
Ser	His	Val	Thr	Leu	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Cys	His	Phe	320	325	330

Pro	Pro	Lys	Asn	Ala	Gly	Arg	Leu	Leu	Leu	Glu	Leu	Asp	Tyr	Ala		335	340	345
Asp	Phe	Gly	Cys	Pro	Ala	Thr	Thr	Thr	Thr	Ala	Thr	Val	Pro	Thr		350	355	360
Thr	Arg	Pro	Val	Val	Arg	Glu	Pro	Thr	Ala	Leu	Ser	Ser	Ser	Leu		365	370	375
Ala	Pro	Thr	Trp	Leu	Ser	Pro	Thr	Ala	Pro	Ala	Thr	Glu	Ala	Pro		380	385	390
Ser	Pro	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Val	Gly	Pro	Val	Pro	Gln		395	400	405
Pro	Gln	Asp	Cys	Pro	Pro	Ser	Thr	Cys	Leu	Asn	Gly	Gly	Thr	Cys		410	415	420
His	Leu	Gly	Thr	Arg	His	His	Leu	Ala	Cys	Leu	Cys	Pro	Glu	Gly		425	430	435
Phe	Thr	Gly	Leu	Tyr	Cys	Glu	Ser	Gln	Met	Gly	Gln	Gly	Thr	Arg		440	445	450
Pro	Ser	Pro	Thr	Pro	Val	Thr	Pro	Arg	Pro	Pro	Arg	Ser	Leu	Thr		455	460	465
Leu	Gly	Ile	Glu	Pro	Val	Ser	Pro	Thr	Ser	Leu	Arg	Val	Gly	Leu		470	475	480
Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg		485	490	495
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr		500	505	510
Leu	Arg	Leu	Pro	Ala	Ser	Leu	Ala	Glu	Tyr	Thr	Val	Thr	Gln	Leu		515	520	525
Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro		530	535	540
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr		545	550	555
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg		560	565	570
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val		575	580	585
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg		590	595	600
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val		605	610	615

Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro
 620 625 630
 Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu
 635 640 645
 Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly
 650 655 660
 Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile
 665 670

<210> 17
 <211> 1672
 <212> DNA
 <213> Homo Sapien

<400> 17
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 gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
 ccatactact gcaggcagag tagttgctgg tcaaataattt cttgattcag 250
 aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
 agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350
 aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaaccag 400
 ctttgaccgc cattgaaggc acagcacatg gggagccctg ccacttcctc 450
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 caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctctttta 750
 tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800
 gaagctgact gaggaaggct ctcccaaggg acagactgct cttggctttc 850
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 cagaatgact ccagagagct ctactttctg ttttttactt ttcatgattg 1450
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18

<211> 301

<212> PRT

<213> Homo Sapien

<400> 18

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Leu	Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Glu	Gly	Ser	Gln	Asp			
				20					25					30			
Glu	Ser	Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val			
				35					40					45			
Lys	Asp	His	Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe			
				50					55					60			
Leu	Asp	Ser	Glu	Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu			
				65					70					75			
Glu	Asp	Ser	Leu	Lys	Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp			
				80					85					90			
Ile	Ser	Phe	Leu	Glu	Ser	Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu			
				95					100					105			
Glu	Pro	Lys	Lys	Val	Arg	Lys	Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly			
				110					115					120			

Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp	
				125					130					135	
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg	
				140					145					150	
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp	
				155					160					165	
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met	
				170					175					180	
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn	
				185					190					195	
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu	
				200					205					210	
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val	
				215					220					225	
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	
				230					235					240	
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	
				245					250					255	
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	
				260					265					270	
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	
				275					280					285	
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg	
				290					295					300	

Leu

<210> 19

<211> 1508

<212> DNA

<213> Homo Sapien

<400> 19

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aggggggaaaa atgctctttt ggggtgctagg cctcctaate ctctgtgggt 150

ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200

tacattttta tcaactggatg tgactcgggc tttggaaact tggcagccag 250

aacttttgat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300

caggatcaac agctttaaag gcagaaacct cagagagact tcgtactgtg 350
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<210> 20
<211> 319
<212> PRT
<213> Homo Sapien

<400> 20
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20	25	30	
Tyr Ile Phe Ile Thr	Gly Cys Asp Ser Gly	Phe Gly Asn Leu Ala	
35	40	45	
Ala Arg Thr Phe Asp	Lys Lys Gly Phe His	Val Ile Ala Ala Cys	
50	55	60	
Leu Thr Glu Ser Gly	Ser Thr Ala Leu Lys	Ala Glu Thr Ser Glu	
65	70	75	
Arg Leu Arg Thr Val	Leu Leu Asp Val Thr	Asp Pro Glu Asn Val	
80	85	90	
Lys Arg Thr Ala Gln	Trp Val Lys Asn Gln	Val Gly Glu Lys Gly	
95	100	105	
Leu Trp Gly Leu Ile	Asn Asn Ala Gly Val	Pro Gly Val Leu Ala	
110	115	120	
Pro Thr Asp Trp Leu	Thr Leu Glu Asp Tyr	Arg Glu Pro Ile Glu	
125	130	135	
Val Asn Leu Phe Gly	Leu Ile Ser Val Thr	Leu Asn Met Leu Pro	
140	145	150	
Leu Val Lys Lys Ala	Gln Gly Arg Val Ile	Asn Val Ser Ser Val	
155	160	165	
Gly Gly Arg Leu Ala	Ile Val Gly Gly Gly	Tyr Thr Pro Ser Lys	
170	175	180	
Tyr Ala Val Glu Gly	Phe Asn Asp Ser Leu	Arg Arg Asp Met Lys	
185	190	195	
Ala Phe Gly Val His	Val Ser Cys Ile Glu	Pro Gly Leu Phe Lys	
200	205	210	
Thr Asn Leu Ala Asp	Pro Val Lys Val Ile	Glu Lys Lys Leu Ala	
215	220	225	
Ile Trp Glu Gln Leu	Ser Pro Asp Ile Lys	Gln Gln Tyr Gly Glu	
230	235	240	
Gly Tyr Ile Glu Lys	Ser Leu Asp Lys Leu	Lys Gly Asn Lys Ser	
245	250	255	
Tyr Val Asn Met Asp	Leu Ser Pro Val Val	Glu Cys Met Asp His	
260	265	270	
Ala Leu Thr Ser Leu	Phe Pro Lys Thr His	Tyr Ala Ala Gly Lys	
275	280	285	
Asp Ala Lys Ile Phe	Trp Ile Pro Leu Ser	His Met Pro Ala Ala	

290

295

300

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Pro Lys Ala Val

<210> 21

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 21

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<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

<400> 22

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				20					25					30

Gly	Phe	Leu	Leu	Gly	Glu	Val	Lys	Gly	Glu	Ala	Lys	Asn	Ser	Ile
				35					40					45

Thr	Asp	Ser	Gln	Met	Asp	Asp	Val	Glu	Val	Val	Tyr	Thr	Ile	Asp
				50					55					60

Ile	Gln	Lys	Tyr	Ile	Pro	Cys	Tyr	Gln	Leu	Phe	Ser	Phe	Tyr	Asn
				65					70					75

Ser	Ser	Gly	Glu	Val	Asn	Glu	Gln	Ala	Leu	Lys	Lys	Ile	Leu	Ser
				80					85					90

Asn	Val	Lys	Lys	Asn	Val	Val	Gly	Trp	Tyr	Lys	Phe	Arg	Arg	His
				95					100					105

Ser Asp Gln Ile	Met Thr Phe Arg Glu Arg	Leu Leu His Lys Asn
110	115	120
Leu Gln Glu His	Phe Ser Asn Gln Asp	Leu Val Phe Leu Leu Leu
125	130	135
Thr Pro Ser Ile	Ile Thr Glu Ser Cys Ser	Thr His Arg Leu Glu
140	145	150
His Ser Leu Tyr	Lys Pro Gln Lys Gly	Leu Phe His Arg Val Pro
155	160	165
Leu Val Val Ala	Asn Leu Gly Met Ser	Glu Gln Leu Gly Tyr Lys
170	175	180
Thr Val Ser Gly	Ser Cys Met Ser Thr	Gly Phe Ser Arg Ala Val
185	190	195
Gln Thr His Ser	Ser Lys Phe Phe Glu	Glu Asp Gly Ser Leu Lys
200	205	210
Glu Val His Lys	Ile Asn Glu Met Tyr	Ala Ser Leu Gln Glu Glu
215	220	225
Leu Lys Ser Ile	Cys Lys Lys Val Glu	Asp Ser Glu Gln Ala Val
230	235	240
Asp Lys Leu Val	Lys Asp Val Asn Arg	Leu Lys Arg Glu Ile Glu
245	250	255
Lys Arg Arg Gly	Ala Gln Ile Gln Ala	Ala Arg Glu Lys Asn Ile
260	265	270
Gln Lys Asp Pro	Gln Glu Asn Ile Phe	Leu Cys Gln Ala Leu Arg
275	280	285
Thr Phe Phe Pro	Asn Ser Glu Phe Leu	His Ser Cys Val Met Ser
290	295	300
Leu Lys Asn Arg	His Val Ser Lys Ser	Ser Cys Asn Tyr Asn His
305	310	315
His Leu Asp Val	Val Asp Asn Leu Thr	Leu Met Val Glu His Thr
320	325	330
Asp Ile Pro Glu	Ala Ser Pro Ala Ser	Thr Pro Gln Ile Ile Lys
335	340	345
His Lys Ala Leu	Asp Leu Asp Asp Arg	Trp Gln Phe Lys Arg Ser
350	355	360
Arg Leu Leu Asp	Thr Gln Asp Lys Arg	Ser Lys Ala Asn Thr Gly
365	370	375
Ser Ser Asn Gln	Asp Lys Ala Ser Lys	Met Ser Ser Pro Glu Thr
380	385	390

Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg
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Ser Pro Thr Phe

<210> 23
 <211> 2651
 <212> DNA
 <213> Homo Sapien

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c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met	Ala	Arg	Phe	Gly	Leu	Pro	Ala	Leu	Leu	Cys	Thr	Leu	Ala	Val
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Leu	Ser	Ala	Ala	Leu	Leu	Ala	Ala	Glu	Leu	Lys	Ser	Lys	Ser	Cys
				20					25					30

Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn
				35					40					45

Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys
				50					55					60

Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr
				65					70					75

Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln
				80					85					90

Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe
				95					100					105

Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu
				110					115					120

Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn
				125					130					135

Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr
				140					145					150

Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp
				155					160					165

Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr
				170					175					180

His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu
				185					190					195

Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln
				200					205					210

Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu
				215					220					225

Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro
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230	235	240
Thr Ala Gln Cys	Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser	
245	250	255
His Cys Arg Gly	Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys	
260	265	270
Ser Asn Ile Met	Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp	
275	280	285
Phe Glu Trp Asn	Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu	
290	295	300
Arg Leu Glu Gly	Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile	
305	310	315
Asp Val Lys Ile	Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser	
320	325	330
Val Gln Val Ser	Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys	
335	340	345
Pro Leu Pro Ala	Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala	
350	355	360
Phe Ser Ala Arg	Phe Arg Pro His His Pro Glu Glu Arg Pro Thr	
365	370	375
Thr Ala Ala Gly	Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys	
380	385	390
Glu Lys Leu Lys	Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser	
395	400	405
Asn Val Cys Asn	Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu	
410	415	420
Asp Asp Cys Trp	Asn Gly Lys Gly Lys Ser Arg Tyr Leu Phe Ala	
425	430	435
Val Thr Gly Asn	Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val	
440	445	450
Gln Val Asp Thr	Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile	
455	460	465
Met Ala Leu Arg	Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn	
470	475	480
Gly Asn Asp Val	Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly	
485	490	495
Glu Gly Ser Gly	Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu	
500	505	510
Phe Asp Tyr Asn	Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu	

	515		520		525									
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
	530				535									540
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
	545								550					555

Arg

<210> 25
 <211> 870
 <212> DNA
 <213> Homo Sapien

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<210> 26
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 26

Met	Lys	Val	Leu	Ile	Ser	Ser	Leu	Leu	Leu	Leu	Pro	Leu	Met	
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Leu	Met	Ser	Met	Val	Ser	Ser	Ser	Leu	Asn	Pro	Gly	Val	Ala	Arg
				20					25					30
Gly	His	Arg	Asp	Arg	Gly	Gln	Ala	Ser	Arg	Arg	Trp	Leu	Gln	Glu
				35					40					45
Gly	Gly	Gln	Glu	Cys	Glu	Cys	Lys	Asp	Trp	Phe	Leu	Arg	Ala	Pro
				50					55					60
Arg	Arg	Lys	Phe	Met	Thr	Val	Ser	Gly	Leu	Pro	Lys	Lys	Gln	Cys
				65					70					75
Pro	Cys	Asp	His	Phe	Lys	Gly	Asn	Val	Lys	Lys	Thr	Arg	His	Gln
				80					85					90
Arg	His	His	Arg	Lys	Pro	Asn	Lys	His	Ser	Arg	Ala	Cys	Gln	Gln
				95					100					105
Phe	Leu	Lys	Gln	Cys	Gln	Leu	Arg	Ser	Phe	Ala	Leu	Pro	Leu	
				110					115					

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

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<210> 28

<211> 277

<212> PRT

<213> Homo Sapien

<400> 28

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Thr	Leu	Pro	Leu	His	Leu	Met	Ala	Leu	Leu	Gly	Cys	Trp	Gln	Pro	20	25	30	
Leu	Cys	Lys	Ser	Tyr	Phe	Pro	Tyr	Leu	Met	Ala	Val	Leu	Thr	Pro	35	40	45	
Lys	Ser	Asn	Arg	Lys	Met	Glu	Ser	Lys	Lys	Arg	Glu	Leu	Phe	Ser	50	55	60	
Gln	Ile	Lys	Gly	Leu	Thr	Gly	Ala	Ser	Gly	Lys	Val	Ala	Leu	Leu	65	70	75	
Glu	Leu	Gly	Cys	Gly	Thr	Gly	Ala	Asn	Phe	Gln	Phe	Tyr	Pro	Pro	80	85	90	
Gly	Cys	Arg	Val	Thr	Cys	Leu	Asp	Pro	Asn	Pro	His	Phe	Glu	Lys	95	100	105	
Phe	Leu	Thr	Lys	Ser	Met	Ala	Glu	Asn	Arg	His	Leu	Gln	Tyr	Glu				

110	115	120
Arg Phe Val Val Ala Pro Gly Glu Asp	Met Arg Gln Leu Ala Asp	
125	130	135
Gly Ser Met Asp Val Val Val Cys Thr	Leu Val Leu Cys Ser Val	
140	145	150
Gln Ser Pro Arg Lys Val Leu Gln Glu	Val Arg Arg Val Leu Arg	
155	160	165
Pro Gly Gly Val Leu Phe Phe Trp Glu	His Val Ala Glu Pro Tyr	
170	175	180
Gly Ser Trp Ala Phe Met Trp Gln Gln	Val Phe Glu Pro Thr Trp	
185	190	195
Lys His Ile Gly Asp Gly Cys Cys Leu	Thr Arg Glu Thr Trp Lys	
200	205	210
Asp Leu Glu Asn Ala Gln Phe Ser Glu	Ile Gln Met Glu Arg Gln	
215	220	225
Pro Pro Pro Leu Lys Trp Leu Pro Val	Gly Pro His Ile Met Gly	
230	235	240
Lys Ala Val Lys Gln Ser Phe Pro Ser	Ser Lys Ala Leu Ile Cys	
245	250	255
Ser Phe Pro Ser Leu Gln Leu Glu Gln	Ala Thr His Gln Pro Ile	
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Tyr Leu Pro Leu Arg Gly Thr		
275		

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450

taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30

<211> 73

<212> PRT

<213> Homo Sapien

<400> 30

Met	Leu	Leu	Leu	Thr	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Lys	Gly
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Ser	Cys	Leu	Glu	Trp	Gly	Leu	Val	Gly	Ala	Gln	Lys	Val	Ser	Ser
			20					25					30	

Ala	Thr	Asp	Ala	Pro	Ile	Arg	Asp	Trp	Ala	Phe	Phe	Pro	Pro	Ser
			35					40						45

Phe	Leu	Cys	Leu	Leu	Pro	His	Arg	Pro	Ala	Met	Thr	Cys	Ser	Gln
			50					55						60

Ala	Gln	Pro	Arg	Gly	Glu	Gly	Glu	Lys	Val	Gly	Asp	Gly
			65					70				

<210> 31

<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

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atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200

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cattgggttat tttgggattg ttgtttgtct gcggtgtttt atggtggetg 350

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gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttct 550

gctgttccag ccactgtgga catttgccat cctcattttc ttctgggtcc 600

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<210> 32

<211> 445

<212> PRT

<213> Homo Sapien

<400> 32

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Ala	Leu	Ser	Leu	Ala	Met	Met	Phe	Thr	Phe	Arg	Phe	Ile	Thr	Thr
				20					25					30

Leu	Leu	Val	His	Ile	Phe	Ile	Ser	Leu	Val	Ile	Leu	Gly	Leu	Leu
				35					40					45

Phe	Val	Cys	Gly	Val	Leu	Trp	Trp	Leu	Tyr	Tyr	Asp	Tyr	Thr	Asn
				50					55					60

Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys	
				65					70					75	
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu	
				80					85					90	
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val	
				95					100					105	
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe	
				110					115					120	
Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe	
				125					130					135	
Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly	
				140					145					150	
Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu	
				155					160					165	
Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile	
				170					175					180	
Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala	
				185					190					195	
Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro	
				200					205					210	
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr	
				215					220					225	
His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val	
				230					235					240	
Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys	
				245					250					255	
Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys	
				260					265					270	
Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn	
				275					280					285	
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys	
				290					295					300	
Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser	
				305					310					315	
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu	
				320					325					330	
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met	
				335					340					345	

Ala	Phe	Asn	Tyr	Asn	Arg	Ala	Phe	Gln	Val	Trp	Ala	Val	Pro	Leu	
				350					355					360	
Leu	Leu	Val	Ala	Phe	Phe	Ala	Tyr	Leu	Val	Ala	His	Ser	Phe	Leu	
				365					370					375	
Ser	Val	Phe	Glu	Thr	Val	Leu	Asp	Ala	Leu	Phe	Leu	Cys	Phe	Ala	
				380					385					390	
Val	Asp	Leu	Glu	Thr	Asn	Asp	Gly	Ser	Ser	Glu	Lys	Pro	Tyr	Phe	
				395					400					405	
Met	Asp	Gln	Glu	Phe	Leu	Ser	Phe	Val	Lys	Arg	Ser	Asn	Lys	Leu	
				410					415					420	
Asn	Asn	Ala	Arg	Ala	Gln	Gln	Asp	Lys	His	Ser	Leu	Arg	Asn	Glu	
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Glu	Gly	Thr	Glu	Leu	Gln	Ala	Ile	Val	Arg						
				440					445						

<210> 33

<211> 2773

<212> DNA

<213> Homo Sapien

<400> 33

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<210> 34

<211> 678

<212> PRT

<213> Homo Sapien

<400> 34

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Phe	Leu	Val	Leu	Leu	Val	Thr	Gly	Val	His	Ser	Asn	Lys	Glu	Thr
			20						25					30
Ala	Lys	Lys	Ile	Lys	Arg	Pro	Lys	Phe	Thr	Val	Pro	Gln	Ile	Asn
				35					40					45
Cys	Asp	Val	Lys	Ala	Gly	Lys	Ile	Ile	Asp	Pro	Glu	Phe	Ile	Val
				50					55					60
Lys	Cys	Pro	Ala	Gly	Cys	Gln	Asp	Pro	Lys	Tyr	His	Val	Tyr	Gly
				65					70					75
Thr	Asp	Val	Tyr	Ala	Ser	Tyr	Ser	Ser	Val	Cys	Gly	Ala	Ala	Val
				80					85					90
His	Ser	Gly	Val	Leu	Asp	Asn	Ser	Gly	Gly	Lys	Ile	Leu	Val	Arg
				95					100					105
Lys	Val	Ala	Gly	Gln	Ser	Gly	Tyr	Lys	Gly	Ser	Tyr	Ser	Asn	Gly
				110					115					120
Val	Gln	Ser	Leu	Ser	Leu	Pro	Arg	Trp	Arg	Glu	Ser	Phe	Ile	Val
				125					130					135

Leu Glu Ser Lys	Pro Lys Lys Gly Val	Thr Tyr Pro Ser Ala	Leu
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Thr Tyr Ser Ser	Ser Lys Ser Pro Ala	Ala Gln Ala Gly Glu	Thr
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Thr Lys Ala Tyr	Gln Arg Pro Pro Ile	Pro Gly Thr Thr Ala	Gln
170		175	180
Pro Val Thr Leu	Met Gln Leu Leu Ala	Val Thr Val Ala Val	Ala
185		190	195
Thr Pro Thr Thr	Leu Pro Arg Pro Ser	Pro Ser Ala Ala Ser	Thr
200		205	210
Thr Ser Ile Pro	Arg Pro Gln Ser Val	Gly His Arg Ser Gln	Glu
215		220	225
Met Asp Leu Trp	Ser Thr Ala Thr Tyr	Thr Ser Ser Gln Asn	Arg
230		235	240
Pro Arg Ala Asp	Pro Gly Ile Gln Arg	Gln Asp Pro Ser Gly	Ala
245		250	255
Ala Phe Gln Lys	Pro Val Gly Ala Asp	Val Ser Leu Gly Leu	Val
260		265	270
Pro Lys Glu Glu	Leu Ser Thr Gln Ser	Leu Glu Pro Val Ser	Leu
275		280	285
Gly Asp Pro Asn	Cys Lys Ile Asp Leu	Ser Phe Leu Ile Asp	Gly
290		295	300
Ser Thr Ser Ile	Gly Lys Arg Arg Phe	Arg Ile Gln Lys Gln	Leu
305		310	315
Leu Ala Asp Val	Ala Gln Ala Leu Asp	Ile Gly Pro Ala Gly	Pro
320		325	330
Leu Met Gly Val	Val Gln Tyr Gly Asp	Asn Pro Ala Thr His	Phe
335		340	345
Asn Leu Lys Thr	His Thr Asn Ser Arg	Asp Leu Lys Thr Ala	Ile
350		355	360
Glu Lys Ile Thr	Gln Arg Gly Gly Leu	Ser Asn Val Gly Arg	Ala
365		370	375
Ile Ser Phe Val	Thr Lys Asn Phe Phe	Ser Lys Ala Asn Gly	Asn
380		385	390
Arg Ser Gly Ala	Pro Asn Val Val Val	Val Met Val Asp Gly	Trp
395		400	405
Pro Thr Asp Lys	Val Glu Glu Ala Ser	Arg Leu Ala Arg Glu	Ser
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Gly Ile Asn Ile	Phe Phe Ile Thr Ile	Glu Gly Ala Ala Glu Asn
425		430 435
Glu Lys Gln Tyr	Val Val Glu Pro Asn	Phe Ala Asn Lys Ala Val
440		445 450
Cys Arg Thr Asn	Gly Phe Tyr Ser Leu	His Val Gln Ser Trp Phe
455		460 465
Gly Leu His Lys	Thr Leu Gln Pro Leu	Val Lys Arg Val Cys Asp
470		475 480
Thr Asp Arg Leu	Ala Cys Ser Lys Thr	Cys Leu Asn Ser Ala Asp
485		490 495
Ile Gly Phe Val	Ile Asp Gly Ser Ser	Ser Val Gly Thr Gly Asn
500		505 510
Phe Arg Thr Val	Leu Gln Phe Val Thr	Asn Leu Thr Lys Glu Phe
515		520 525
Glu Ile Ser Asp	Thr Asp Thr Arg Ile	Gly Ala Val Gln Tyr Thr
530		535 540
Tyr Glu Gln Arg	Leu Glu Phe Gly Phe	Asp Lys Tyr Ser Ser Lys
545		550 555
Pro Asp Ile Leu	Asn Ala Ile Lys Arg	Val Gly Tyr Trp Ser Gly
560		565 570
Gly Thr Ser Thr	Gly Ala Ala Ile Asn	Phe Ala Leu Glu Gln Leu
575		580 585
Phe Lys Lys Ser	Lys Pro Asn Lys Arg	Lys Leu Met Ile Leu Ile
590		595 600
Thr Asp Gly Arg	Ser Tyr Asp Asp Val	Arg Ile Pro Ala Met Ala
605		610 615
Ala His Leu Lys	Gly Val Ile Thr Tyr	Ala Ile Gly Val Ala Trp
620		625 630
Ala Ala Gln Glu	Glu Leu Glu Val Ile	Ala Thr His Pro Ala Arg
635		640 645
Asp His Ser Phe	Phe Val Asp Glu Phe	Asp Asn Leu His Gln Tyr
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Pro Arg Asn		

<210> 35
 <211> 2095
 <212> DNA

<213> Homo Sapien

<400> 35

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<210> 36
 <211> 331
 <212> PRT
 <213> Homo Sapien

<400> 36
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 Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu
 35 40 45
 Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
 50 55 60
 Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75
 Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90
 Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
 95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln	110	115	120
Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp	125	130	135
Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp	140	145	150
Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp	155	160	165
Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp	170	175	180
Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu	185	190	195
Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile	200	205	210
Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser	215	220	225
Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly	230	235	240
Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu	245	250	255
Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val	260	265	270
Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu	275	280	285
Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys	290	295	300
Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu	305	310	315
Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His	320	325	330

Tyr

<210> 37

<211> 2846

<212> DNA

<213> Homo Sapien

<400> 37

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 tcgggagtg c tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
 gggaagtcgt ggggtataacc atcccttgct gcaggaatga ggagaatgag 250
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<210> 38
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 38

Met	Glu	Leu	Gly	Cys	Trp	Thr	Gln	Leu	Gly	Leu	Thr	Phe	Leu	Gln	1	5	10	15
Leu	Leu	Leu	Ile	Ser	Ser	Leu	Pro	Arg	Glu	Tyr	Thr	Val	Ile	Asn	20	25	30	
Glu	Ala	Cys	Pro	Gly	Ala	Glu	Trp	Asn	Ile	Met	Cys	Arg	Glu	Cys	35	40	45	
Cys	Glu	Tyr	Asp	Gln	Ile	Glu	Cys	Val	Cys	Pro	Gly	Lys	Arg	Glu	50	55	60	
Val	Val	Gly	Tyr	Thr	Ile	Pro	Cys	Cys	Arg	Asn	Glu	Glu	Asn	Glu	65	70	75	
Cys	Asp	Ser	Cys	Leu	Ile	His	Pro	Gly	Cys	Thr	Ile	Phe	Glu	Asn	80	85	90	
Cys	Lys	Ser	Cys	Arg	Asn	Gly	Ser	Trp	Gly	Gly	Thr	Leu	Asp	Asp	95	100	105	
Phe	Tyr	Val	Lys	Gly	Phe	Tyr	Cys	Ala	Glu	Cys	Arg	Ala	Gly	Trp	110	115	120	
Tyr	Gly	Gly	Asp	Cys	Met	Arg	Cys	Gly	Gln	Val	Leu	Arg	Ala	Pro	125	130	135	
Lys	Gly	Gln	Ile	Leu	Leu	Glu	Ser	Tyr	Pro	Leu	Asn	Ala	His	Cys	140	145	150	
Glu	Trp	Thr	Ile	His	Ala	Lys	Pro	Gly	Phe	Val	Ile	Gln	Leu	Arg	155	160	165	
Phe	Val	Met	Leu	Ser	Leu	Glu	Phe	Asp	Tyr	Met	Cys	Gln	Tyr	Asp	170	175	180	
Tyr	Val	Glu	Val	Arg	Asp	Gly	Asp	Asn	Arg	Asp	Gly	Gln	Ile	Ile	185	190	195	
Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile	200	205	210	
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn	215	220	225	
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser	230	235	240	
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala	245	250	255	
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg	260	265	270	
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly	275	280	285	

Pro Val Asn Gly Tyr Gln Lys Ile Thr	Gly Gly Pro Gly Leu Ile	290	300
Asn Gly Arg His Ala Lys Ile Gly Thr	Val Val Ser Phe Phe Cys	305	315
Asn Asn Ser Tyr Val Leu Ser Gly Asn	Glu Lys Arg Thr Cys Gln	320	330
Gln Asn Gly Glu Trp Ser Gly Lys Gln	Pro Ile Cys Ile Lys Ala	335	345
Cys Arg Glu Pro Lys Ile Ser Asp Leu	Val Arg Arg Arg Val Leu	350	360
Pro Met Gln Val Gln Ser Arg Glu Thr	Pro Leu His Gln Leu Tyr	365	375
Ser Ala Ala Phe Ser Lys Gln Lys Leu	Gln Ser Ala Pro Thr Lys	380	390
Lys Pro Ala Leu Pro Phe Gly Asp Leu	Pro Met Gly Tyr Gln His	395	405
Leu His Thr Gln Leu Gln Tyr Glu Cys	Ile Ser Pro Phe Tyr Arg	410	420
Arg Leu Gly Ser Ser Arg Arg Thr Cys	Leu Arg Thr Gly Lys Trp	425	435
Ser Gly Arg Ala Pro Ser Cys Ile Pro	Ile Cys Gly Lys Ile Glu	440	450
Asn Ile Thr Ala Pro Lys Thr Gln Gly	Leu Arg Trp Pro Trp Gln	455	465
Ala Ala Ile Tyr Arg Arg Thr Ser Gly	Val His Asp Gly Ser Leu	470	480
His Lys Gly Ala Trp Phe Leu Val Cys	Ser Gly Ala Leu Val Asn	485	495
Glu Arg Thr Val Val Val Ala Ala His	Cys Val Thr Asp Leu Gly	500	510
Lys Val Thr Met Ile Lys Thr Ala Asp	Leu Lys Val Val Leu Gly	515	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp	Glu Lys Thr Ile Gln Ser	530	540
Leu Gln Ile Ser Ala Ile Ile Leu His	Pro Asn Tyr Asp Pro Ile	545	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu	Lys Leu Leu Asp Lys Ala	560	570

Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg	
				575					580					585	
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly	
				590					595					600	
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	
				605					610					615	
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	
				620					625					630	
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	
				635					640					645	
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	
				650					655					660	
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	
				665					670					675	
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	
				680					685					690	
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	
				695					700					705	
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	
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<210> 39
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 39
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 ggctggtttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctggtct tgccttggt 250
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 aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
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acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
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caccagcata caatgatgga agaattagat gtggtgatat tcttcttgct 2000
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<210> 40

<211> 632

<212> PRT

<213> Homo Sapien

<400> 40

Met	Lys	Ala	Leu	Leu	Leu	Leu	Val	Leu	Pro	Trp	Leu	Ser	Pro	Ala	1	5	10	15
Asn	Tyr	Ile	Asp	Asn	Val	Gly	Asn	Leu	His	Phe	Leu	Tyr	Ser	Glu	20	25	30	
Leu	Cys	Lys	Gly	Ala	Ser	His	Tyr	Gly	Leu	Thr	Lys	Asp	Arg	Lys	35	40	45	
Arg	Arg	Ser	Gln	Asp	Gly	Cys	Pro	Asp	Gly	Cys	Ala	Ser	Leu	Thr	50	55	60	
Ala	Thr	Ala	Pro	Ser	Pro	Glu	Val	Ser	Ala	Ala	Ala	Thr	Ile	Ser	65	70	75	
Leu	Met	Thr	Asp	Glu	Pro	Gly	Leu	Asp	Asn	Pro	Ala	Tyr	Val	Ser	80	85	90	
Ser	Ala	Glu	Asp	Gly	Gln	Pro	Ala	Ile	Ser	Pro	Val	Asp	Ser	Gly	95	100	105	
Arg	Ser	Asn	Arg	Thr	Arg	Ala	Arg	Pro	Phe	Glu	Arg	Ser	Thr	Ile	110	115	120	
Arg	Ser	Arg	Ser	Phe	Lys	Lys	Ile	Asn	Arg	Ala	Leu	Ser	Val	Leu				

	125		130		135
Arg Arg Thr Lys	Ser Gly Ser Ala Val	Ala Asn His Ala Asp	Gln		
	140	145	150		
Gly Arg Glu Asn	Ser Glu Asn Thr Thr	Ala Pro Glu Val Phe	Pro		
	155	160	165		
Arg Leu Tyr His	Leu Ile Pro Asp Gly	Glu Ile Thr Ser Ile	Lys		
	170	175	180		
Ile Asn Arg Val	Asp Pro Ser Glu Ser	Leu Ser Ile Arg Leu	Val		
	185	190	195		
Gly Gly Ser Glu	Thr Pro Leu Val His	Ile Ile Ile Gln His	Ile		
	200	205	210		
Tyr Arg Asp Gly	Val Ile Ala Arg Asp	Gly Arg Leu Leu Pro	Gly		
	215	220	225		
Asp Ile Ile Leu	Lys Val Asn Gly Met	Asp Ile Ser Asn Val	Pro		
	230	235	240		
His Asn Tyr Ala	Val Arg Leu Leu Arg	Gln Pro Cys Gln Val	Leu		
	245	250	255		
Trp Leu Thr Val	Met Arg Glu Gln Lys	Phe Arg Ser Arg Asn	Asn		
	260	265	270		
Gly Gln Ala Pro	Asp Ala Tyr Arg Pro	Arg Asp Asp Ser Phe	His		
	275	280	285		
Val Ile Leu Asn	Lys Ser Ser Pro Glu	Glu Gln Leu Gly Ile	Lys		
	290	295	300		
Leu Val Arg Lys	Val Asp Glu Pro Gly	Val Phe Ile Phe Asn	Val		
	305	310	315		
Leu Asp Gly Gly	Val Ala Tyr Arg His	Gly Gln Leu Glu Glu	Asn		
	320	325	330		
Asp Arg Val Leu	Ala Ile Asn Gly His	Asp Leu Arg Tyr Gly	Ser		
	335	340	345		
Pro Glu Ser Ala	Ala His Leu Ile Gln	Ala Ser Glu Arg Arg	Val		
	350	355	360		
His Leu Val Val	Ser Arg Gln Val Arg	Gln Arg Ser Pro Asp	Ile		
	365	370	375		
Phe Gln Glu Ala	Gly Trp Asn Ser Asn	Gly Ser Trp Ser Pro	Gly		
	380	385	390		
Pro Gly Glu Arg	Ser Asn Thr Pro Lys	Pro Leu His Pro Thr	Ile		
	395	400	405		
Thr Cys His Glu	Lys Val Val Asn Ile	Gln Lys Asp Pro Gly	Glu		

410	415	420
Ser Leu Gly Met Thr Val Ala Gly Gly	Ala Ser His Arg Glu Trp	
425	430	435
Asp Leu Pro Ile Tyr Val Ile Ser Val	Glu Pro Gly Gly Val Ile	
440	445	450
Ser Arg Asp Gly Arg Ile Lys Thr Gly	Asp Ile Leu Leu Asn Val	
455	460	465
Asp Gly Val Glu Leu Thr Glu Val Ser	Arg Ser Glu Ala Val Ala	
470	475	480
Leu Leu Lys Arg Thr Ser Ser Ser Ile	Val Leu Lys Ala Leu Glu	
485	490	495
Val Lys Glu Tyr Glu Pro Gln Glu Asp	Cys Ser Ser Pro Ala Ala	
500	505	510
Leu Asp Ser Asn His Asn Met Ala Pro	Pro Ser Asp Trp Ser Pro	
515	520	525
Ser Trp Val Met Trp Leu Glu Leu Pro	Arg Cys Leu Tyr Asn Cys	
530	535	540
Lys Asp Ile Val Leu Arg Arg Asn Thr	Ala Gly Ser Leu Gly Phe	
545	550	555
Cys Ile Val Gly Gly Tyr Glu Glu Tyr	Asn Gly Asn Lys Pro Phe	
560	565	570
Phe Ile Lys Ser Ile Val Glu Gly Thr	Pro Ala Tyr Asn Asp Gly	
575	580	585
Arg Ile Arg Cys Gly Asp Ile Leu Leu	Ala Val Asn Gly Arg Ser	
590	595	600
Thr Ser Gly Met Ile His Ala Cys Leu	Ala Arg Leu Leu Lys Glu	
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Leu Lys Gly Arg Ile Thr Leu Thr Ile	Val Ser Trp Pro Gly Thr	
620	625	630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

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agctcaactt gaagctttct tgcoctgcagt gaagcagaga gatagatatt 100

attcacgtaa taaaaaacat gggtttcaac ctgactttcc acctttccta 150
 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgccca ttcaagagat tcctaaagca 250
 aaggagtcca tggctaattt ccataagacc ctcatTTttgg ggaagggaaa 300
 aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
 gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
 ccggtatcgc cctcaggaat gtaaagcttt acagaggggtc gccatcctcg 500
 ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
 catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
 ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
 atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
 gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
 tcccaagcat ctggtggttg gcaggaacag cactgggtac aggttacgtt 800
 acagtggata ttttgggggt gttactgecc taagcagaga gcagtttttc 850
 aagggtgaatg gatttctctaa caactactgg ggatggggag gcgaagacga 900
 tgacctcaga ctcaggggtg agctccaaag aatgaaaatt tcccggcccc 950
 tgctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttgggtgca 1150
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 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
 acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
 ctctgggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
 tcattttgat catgaggggt aaatattgta atatggatac ttgaaggact 1400
 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
 tggttgaagg agattttattt aaatttgaag taatatatta tgggataaaa 1500
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550

cgtccaaggt agaaaggtac gaagatacaa tactgttatt catttattcct 1600
 gtacaatcat ctgtgaagtg gtgggtgtcag gtgagaaggc gtccacaaaa 1650
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 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42

<211> 344

<212> PRT

<213> Homo Sapien

<400> 42

Met	Gly	Phe	Asn	Leu	Thr	Phe	His	Leu	Ser	Tyr	Lys	Phe	Arg	Leu	1	5	10	15
Leu	Leu	Leu	Leu	Thr	Leu	Cys	Leu	Thr	Val	Val	Gly	Trp	Ala	Thr	20	25	30	
Ser	Asn	Tyr	Phe	Val	Gly	Ala	Ile	Gln	Glu	Ile	Pro	Lys	Ala	Lys	35	40	45	
Glu	Phe	Met	Ala	Asn	Phe	His	Lys	Thr	Leu	Ile	Leu	Gly	Lys	Gly	50	55	60	
Lys	Thr	Leu	Thr	Asn	Glu	Ala	Ser	Thr	Lys	Lys	Val	Glu	Leu	Asp	65	70	75	
Asn	Cys	Pro	Ser	Val	Ser	Pro	Tyr	Leu	Arg	Gly	Gln	Ser	Lys	Leu	80	85	90	
Ile	Phe	Lys	Pro	Asp	Leu	Thr	Leu	Glu	Glu	Val	Gln	Ala	Glu	Asn	95	100	105	
Pro	Lys	Val	Ser	Arg	Gly	Arg	Tyr	Arg	Pro	Gln	Glu	Cys	Lys	Ala	110	115	120	
Leu	Gln	Arg	Val	Ala	Ile	Leu	Val	Pro	His	Arg	Asn	Arg	Glu	Lys	125	130	135	
His	Leu	Met	Tyr	Leu	Leu	Glu	His	Leu	His	Pro	Phe	Leu	Gln	Arg	140	145	150	
Gln	Gln	Leu	Asp	Tyr	Gly	Ile	Tyr	Val	Ile	His	Gln	Ala	Glu	Gly	155	160	165	

Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu	170	175	180
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val	185	190	195
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu	200	205	210
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg	215	220	225
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	230	235	240
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	245	250	255
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	260	265	270
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	275	280	285
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	290	295	300
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	305	310	315
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn	320	325	330
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala		335	340	

<210> 43

<211> 485

<212> DNA

<213> Homo Sapien

<400> 43

gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50

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ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150

gcaaccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200

agaggcgaag gaggcgagac acccaacttcc ccatctgcat tttctgctgc 250

ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300

acctgccttg cccccgtccc ctcccttctt tattttattcc tgctgcccga 350

gaacataggt cttggaataa aatggctggt tcttttgttt tccaaaaaaa 400

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu
1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100

gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150

tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200

tcaacacaac ccctcttgtc accatacagc cagaaggggg cactatcata 250

gtgacccaaa atcgtaatag ggagagagta gacttcccaag atggaggcta 300

ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350

tggggatata cagctcatca ctccagcagc cctccaccca ggagtacgtg 400

ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450

gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500

atggggaaga ggatgtgatt tatacctgga aggccctggg gcaagcagcc 550

aatgagtccc ataatgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaaact 650
 tctcaagccc catccttgcc aggaagctct gtgaaggtgc tgctgatgac 700
 ccagattcct ccattggctc cctgtgtctc ctgttggtgc cctcctgct 750
 cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
 aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaaact 850
 cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
 tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950
 ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
 atgccagaca caccaaggct atttgcctat gagaatgtta tctagacagc 1050
 agtgcaactcc cctaagtctc tgctca 1076

<210> 46

<211> 335

<212> PRT

<213> Homo Sapien

<400> 46

Met	Ala	Gly	Ser	Pro	Thr	Cys	Leu	Thr	Leu	Ile	Tyr	Ile	Leu	Trp
1				5					10					15
Gln	Leu	Thr	Gly	Ser	Ala	Ala	Ser	Gly	Pro	Val	Lys	Glu	Leu	Val
			20						25					30
Gly	Ser	Val	Gly	Gly	Ala	Val	Thr	Phe	Pro	Leu	Lys	Ser	Lys	Val
			35						40					45
Lys	Gln	Val	Asp	Ser	Ile	Val	Trp	Thr	Phe	Asn	Thr	Thr	Pro	Leu
			50						55					60
Val	Thr	Ile	Gln	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Val	Thr	Gln	Asn
			65						70					75
Arg	Asn	Arg	Glu	Arg	Val	Asp	Phe	Pro	Asp	Gly	Gly	Tyr	Ser	Leu
			80						85					90
Lys	Leu	Ser	Lys	Leu	Lys	Lys	Asn	Asp	Ser	Gly	Ile	Tyr	Tyr	Val
			95						100					105
Gly	Ile	Tyr	Ser	Ser	Ser	Leu	Gln	Gln	Pro	Ser	Thr	Gln	Glu	Tyr
			110						115					120
Val	Leu	His	Val	Tyr	Glu	His	Leu	Ser	Lys	Pro	Lys	Val	Thr	Met
			125						130					135
Gly	Leu	Gln	Ser	Asn	Lys	Asn	Gly	Thr	Cys	Val	Thr	Asn	Leu	Thr
			140						145					150

Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys	155	160	165
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu	170	175	180
Pro	Ile	Ser	Trp	Arg	Trp	Gly	Glu	Ser	Asp	Met	Thr	Phe	Ile	Cys	185	190	195
Val	Ala	Arg	Asn	Pro	Val	Ser	Arg	Asn	Phe	Ser	Ser	Pro	Ile	Leu	200	205	210
Ala	Arg	Lys	Leu	Cys	Glu	Gly	Ala	Ala	Asp	Asp	Pro	Asp	Ser	Ser	215	220	225
Met	Val	Leu	Leu	Cys	Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Ser	Leu	230	235	240
Phe	Val	Leu	Gly	Leu	Phe	Leu	Trp	Phe	Leu	Lys	Arg	Glu	Arg	Gln	245	250	255
Glu	Glu	Tyr	Ile	Glu	Glu	Lys	Lys	Arg	Val	Asp	Ile	Cys	Arg	Glu	260	265	270
Thr	Pro	Asn	Ile	Cys	Pro	His	Ser	Gly	Glu	Asn	Thr	Glu	Tyr	Asp	275	280	285
Thr	Ile	Pro	His	Thr	Asn	Arg	Thr	Ile	Leu	Lys	Glu	Asp	Pro	Ala	290	295	300
Asn	Thr	Val	Tyr	Ser	Thr	Val	Glu	Ile	Pro	Lys	Lys	Met	Glu	Asn	305	310	315
Pro	His	Ser	Leu	Leu	Thr	Met	Pro	Asp	Thr	Pro	Arg	Leu	Phe	Ala	320	325	330
Tyr	Glu	Asn	Val	Ile											335		

<210> 47
 <211> 766
 <212> DNA
 <213> Homo Sapien

<400> 47
 ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50
 gacatcctgc aatggattca gcttgctggt tctactgctg ttaggagtag 100
 ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150
 tctcaaaacc ccatctcttg ctttgagtgg tgggtcccag gaattatagg 200
 agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
 aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300

agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactgggtt 500
 caataaacc accagtaacg acaccatggc gagtggtctg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcattcggtt tccttggctg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 48

<211> 229

<212> PRT

<213> Homo Sapien

<400> 48

Met	Thr	Cys	Cys	Glu	Gly	Trp	Thr	Ser	Cys	Asn	Gly	Phe	Ser	Leu
1				5					10					15
Leu	Val	Leu	Leu	Leu	Leu	Gly	Val	Val	Leu	Asn	Ala	Ile	Pro	Leu
				20					25					30
Ile	Val	Ser	Leu	Val	Glu	Glu	Asp	Gln	Phe	Ser	Gln	Asn	Pro	Ile
				35					40					45
Ser	Cys	Phe	Glu	Trp	Trp	Phe	Pro	Gly	Ile	Ile	Gly	Ala	Gly	Leu
				50					55					60
Met	Ala	Ile	Pro	Ala	Thr	Thr	Met	Ser	Leu	Thr	Ala	Arg	Lys	Arg
				65					70					75
Ala	Cys	Cys	Asn	Asn	Arg	Thr	Gly	Met	Phe	Leu	Ser	Ser	Phe	Phe
				80					85					90
Ser	Val	Ile	Thr	Val	Ile	Gly	Ala	Leu	Tyr	Cys	Met	Leu	Ile	Ser
				95					100					105
Ile	Gln	Ala	Leu	Leu	Lys	Gly	Pro	Leu	Met	Cys	Asn	Ser	Pro	Ser
				110					115					120
Asn	Ser	Asn	Ala	Asn	Cys	Glu	Phe	Ser	Leu	Lys	Asn	Ile	Ser	Asp
				125					130					135
Ile	His	Pro	Glu	Ser	Phe	Asn	Leu	Gln	Trp	Phe	Phe	Asn	Asp	Ser
				140					145					150
Cys	Ala	Pro	Pro	Thr	Gly	Phe	Asn	Lys	Pro	Thr	Ser	Asn	Asp	Thr

	155		160		165									
Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu
				170					175					180
Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu
				185					190					195
Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile
				200					205					210
Val	Ile	Gly	Phe	Leu	Gly	Cys	Leu	Cys	Gly	Val	Ser	Lys	Arg	Arg
				215					220					225
Ser Gln Ile Val														

<210> 49
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 49
 atccgttctc tgcgctgcca gctcaggtga gccctcgcca aggtgacctc 50
 gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagtg cctctcccc tgcagccctg ccctcgaac tgtgacatgg 200
 agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaagca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tctccccctg ggaggcctta tctcaagga 550
 aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
 ttctttatga attaaactcg cccaccacc ccctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15

Ala	Leu	Glu	Ala	Asn	Asp	Pro	Phe	Ala	Asn	Lys	Asp	Asp	Pro	Phe	20	25	30
Tyr	Tyr	Asp	Trp	Lys	Asn	Leu	Gln	Leu	Ser	Gly	Leu	Ile	Cys	Gly	35	40	45
Gly	Leu	Leu	Ala	Ile	Ala	Gly	Ile	Ala	Ala	Val	Leu	Ser	Gly	Lys	50	55	60
Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu	65	70	75
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys		80	85	

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 51
 gtggactctg agaagcccag gcagttgagg acaggagaga gaaggctgca 50
 gacccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
 gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
 agacactctg gagagagagg gggctgggca gagatgaagt tccagggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggagc ctggctctaa agtcagttag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
 acggagcaga tgctgtccgc ggctcctggc aggggggtgcc tggccacagt 600
 ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaagggtg 650
 ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
 tccacggata ccccgaaac tcagcaggca gctttggaat gaatcctcag 750
 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caaactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcaggtgga 900

ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
 cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
 agtgggtggca gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
 tgagtcctcc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
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 gaagcccgcg ggagcgggga atctgggatt cagggttca gaggacaggg 1250
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 ggaggtgacg ctgttggttg agtcaatact gtgaactctg agacgtctcc 1400
 tgggatgttt aactttgaca ctttctggaa gaatttttaa tccaagctgg 1450
 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
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 aaataaacct tagctgcccc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52

<211> 440

<212> PRT

<213> Homo Sapien

<400> 52

Met	Lys	Phe	Gln	Gly	Pro	Leu	Ala	Cys	Leu	Leu	Leu	Ala	Leu	Cys
1				5				10						15

Leu	Gly	Ser	Gly	Glu	Ala	Gly	Pro	Leu	Gln	Ser	Gly	Glu	Glu	Ser
				20				25						30

Thr	Gly	Thr	Asn	Ile	Gly	Glu	Ala	Leu	Gly	His	Gly	Leu	Gly	Asp
				35				40						45

Ala	Leu	Ser	Glu	Gly	Val	Gly	Lys	Ala	Ile	Gly	Lys	Glu	Ala	Gly
				50				55						60

Gly	Ala	Ala	Gly	Ser	Lys	Val	Ser	Glu	Ala	Leu	Gly	Gln	Gly	Thr
				65				70						75

Arg	Glu	Ala	Val	Gly	Thr	Gly	Val	Arg	Gln	Val	Pro	Gly	Phe	Gly
				80				85						90

Ala Ala Asp Ala	Leu Gly Asn Arg Val	Gly Glu Ala Ala His Ala	95	100	105
Leu Gly Asn Thr	Gly His Glu Ile Gly	Arg Gln Ala Glu Asp Val	110	115	120
Ile Arg His Gly	Ala Asp Ala Val Arg	Gly Ser Trp Gln Gly Val	125	130	135
Pro Gly His Ser	Gly Ala Trp Glu Thr	Ser Gly Gly His Gly Ile	140	145	150
Phe Gly Ser Gln	Gly Gly Leu Gly Gly	Gln Gly Gln Gly Asn Pro	155	160	165
Gly Gly Leu Gly	Thr Pro Trp Val His	Gly Tyr Pro Gly Asn Ser	170	175	180
Ala Gly Ser Phe	Gly Met Asn Pro Gln	Gly Ala Pro Trp Gly Gln	185	190	195
Gly Gly Asn Gly	Gly Pro Pro Asn Phe	Gly Thr Asn Thr Gln Gly	200	205	210
Ala Val Ala Gln	Pro Gly Tyr Gly Ser	Val Arg Ala Ser Asn Gln	215	220	225
Asn Glu Gly Cys	Thr Asn Pro Pro Pro	Ser Gly Ser Gly Gly Gly	230	235	240
Ser Ser Asn Ser	Gly Gly Gly Ser Gly	Ser Gln Ser Gly Ser Ser	245	250	255
Gly Ser Gly Ser	Asn Gly Asp Asn Asn	Asn Gly Ser Ser Ser Gly	260	265	270
Gly Ser Ser Ser	Gly Ser Ser Ser Gly	Ser Ser Ser Gly Gly Ser	275	280	285
Ser Gly Gly Ser	Ser Gly Gly Ser Ser	Gly Asn Ser Gly Gly Ser	290	295	300
Arg Gly Asp Ser	Gly Ser Glu Ser Ser	Trp Gly Ser Ser Thr Gly	305	310	315
Ser Ser Ser Gly	Asn His Gly Gly Ser	Gly Gly Gly Asn Gly His	320	325	330
Lys Pro Gly Cys	Glu Lys Pro Gly Asn	Glu Ala Arg Gly Ser Gly	335	340	345
Glu Ser Gly Ile	Gln Gly Phe Arg Gly	Gln Gly Val Ser Ser Asn	350	355	360
Met Arg Glu Ile	Ser Lys Glu Gly Asn	Arg Leu Leu Gly Gly Ser	365	370	375

Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly
				380					385					390
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser
				395					400					405
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser
				410					415					420
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg
				425					430					435
Ser	Ser	Arg	Ile	Pro										
				440										

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
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 actcctgctg ctggttgtgg gctcctggct actcgcccgc atcctggctt 150
 ggacctatgc cttctataac aactgccgcc ggctccagtg tttcccacag 200
 cccccaaaac ggaactgggt ttggggtcac ctgggcctga tcaactctac 250
 agaggagggc ttgaaggact cgaccagat gtcggccacc tattcccagg 300
 gctttacggt atggctgggt cccatcatcc ctttcatcgt tttatgccac 350
 cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcacccaa 400
 ggataatctc ttcacaggt tcctgaagcc ctggctggga gaagggatac 450
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 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
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 gtcatgaata aaacggtgct gtcaaa 1676

<210> 54

<211> 524

<212> PRT

<213> Homo Sapien

<400> 54

Met	Ser	Leu	Leu	Ser	Leu	Pro	Trp	Leu	Gly	Leu	Arg	Pro	Val	Ala
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Met	Ser	Pro	Trp	Leu	Leu	Leu	Leu	Leu	Val	Val	Gly	Ser	Trp	Leu
				20					25					30
Leu	Ala	Arg	Ile	Leu	Ala	Trp	Thr	Tyr	Ala	Phe	Tyr	Asn	Asn	Cys
				35					40					45
Arg	Arg	Leu	Gln	Cys	Phe	Pro	Gln	Pro	Pro	Lys	Arg	Asn	Trp	Phe
				50					55					60
Trp	Gly	His	Leu	Gly	Leu	Ile	Thr	Pro	Thr	Glu	Glu	Gly	Leu	Lys
				65					70					75
Asp	Ser	Thr	Gln	Met	Ser	Ala	Thr	Tyr	Ser	Gln	Gly	Phe	Thr	Val
				80					85					90
Trp	Leu	Gly	Pro	Ile	Ile	Pro	Phe	Ile	Val	Leu	Cys	His	Pro	Asp
				95					100					105

Thr	Ile	Arg	Ser	Ile	Thr	Asn	Ala	Ser	Ala	Ala	Ile	Ala	Pro	Lys	
				110					115					120	
Asp	Asn	Leu	Phe	Ile	Arg	Phe	Leu	Lys	Pro	Trp	Leu	Gly	Glu	Gly	
				125					130					135	
Ile	Leu	Leu	Ser	Gly	Gly	Asp	Lys	Trp	Ser	Arg	His	Arg	Arg	Met	
				140					145					150	
Leu	Thr	Pro	Ala	Phe	His	Phe	Asn	Ile	Leu	Lys	Ser	Tyr	Ile	Thr	
				155					160					165	
Ile	Phe	Asn	Lys	Ser	Ala	Asn	Ile	Met	Leu	Asp	Lys	Trp	Gln	His	
				170					175					180	
Leu	Ala	Ser	Glu	Gly	Ser	Ser	Arg	Leu	Asp	Met	Phe	Glu	His	Ile	
				185					190					195	
Ser	Leu	Met	Thr	Leu	Asp	Ser	Leu	Gln	Lys	Cys	Ile	Phe	Ser	Phe	
				200					205					210	
Asp	Ser	His	Cys	Gln	Glu	Arg	Pro	Ser	Glu	Tyr	Ile	Ala	Thr	Ile	
				215					220					225	
Leu	Glu	Leu	Ser	Ala	Leu	Val	Glu	Lys	Arg	Ser	Gln	His	Ile	Leu	
				230					235					240	
Gln	His	Met	Asp	Phe	Leu	Tyr	Tyr	Leu	Ser	His	Asp	Gly	Arg	Arg	
				245					250					255	
Phe	His	Arg	Ala	Cys	Arg	Leu	Val	His	Asp	Phe	Thr	Asp	Ala	Val	
				260					265					270	
Ile	Arg	Glu	Arg	Arg	Arg	Thr	Leu	Pro	Thr	Gln	Gly	Ile	Asp	Asp	
				275					280					285	
Phe	Phe	Lys	Asp	Lys	Ala	Lys	Ser	Lys	Thr	Leu	Asp	Phe	Ile	Asp	
				290					295					300	
Val	Leu	Leu	Leu	Ser	Lys	Asp	Glu	Asp	Gly	Lys	Ala	Leu	Ser	Asp	
				305					310					315	
Glu	Asp	Ile	Arg	Ala	Glu	Ala	Asp	Thr	Phe	Met	Phe	Gly	Gly	His	
				320					325					330	
Asp	Thr	Thr	Ala	Ser	Gly	Leu	Ser	Trp	Val	Leu	Tyr	Asn	Leu	Ala	
				335					340					345	
Arg	His	Pro	Glu	Tyr	Gln	Glu	Arg	Cys	Arg	Gln	Glu	Val	Gln	Glu	
				350					355					360	
Leu	Leu	Lys	Asp	Arg	Asp	Pro	Lys	Glu	Ile	Glu	Trp	Asp	Asp	Leu	
				365					370					375	
Ala	Gln	Leu	Pro	Phe	Leu	Thr	Met	Cys	Val	Lys	Glu	Ser	Leu	Arg	
				380					385					390	

Leu	His	Pro	Pro	Ala	Pro	Phe	Ile	Ser	Arg	Cys	Cys	Thr	Gln	Asp	
				395					400					405	
Ile	Val	Leu	Pro	Asp	Gly	Arg	Val	Ile	Pro	Lys	Gly	Ile	Thr	Cys	
				410					415					420	
Leu	Ile	Asp	Ile	Ile	Gly	Val	His	His	Asn	Pro	Thr	Val	Trp	Pro	
				425					430					435	
Asp	Pro	Glu	Val	Tyr	Asp	Pro	Phe	Arg	Phe	Asp	Pro	Glu	Asn	Ser	
				440					445					450	
Lys	Gly	Arg	Ser	Pro	Leu	Ala	Phe	Ile	Pro	Phe	Ser	Ala	Gly	Pro	
				455					460					465	
Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val	
				470					475					480	
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His	
				485					490					495	
Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly	
				500					505					510	
Gly	Leu	Trp	Leu	Arg	Val	Glu	Pro	Leu	Asn	Val	Gly	Leu	Gln		
				515					520						

<210> 55
 <211> 644
 <212> DNA
 <213> Homo Sapien

<400> 55
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 tgtgttttgc acttaccctg tggtctgcct tttggtggca taacaaggga 150
 cttgcactta tcttctgcat tttgcagtct ttggcattga cgtggtacag 200
 cctttccttc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250
 tgtgtcttgc ataattcatg gccagtttta tgaagctttg gaaggcacta 300
 tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350
 tacagacatg tgccttttat cttgcagcaa tgtgttgctt gtgattcgaa 400
 catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450
 cagtagcaca ggatgagaag tgggttctgt atcttgtgga gtggaatctt 500
 cctcatgtac ctgtttctct tctggatggt gtcccactga attcccatga 550
 atacaaacct attcagcaac agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 600

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

<210> 56

<211> 77

<212> PRT

<213> Homo Sapien

<400> 56

Met	Gly	Pro	Val	Lys	Gln	Leu	Lys	Arg	Met	Phe	Glu	Pro	Thr	Arg
1				5					10					15

Leu	Ile	Ala	Thr	Ile	Met	Val	Leu	Leu	Cys	Phe	Ala	Leu	Thr	Leu
				20					25					30

Cys	Ser	Ala	Phe	Trp	Trp	His	Asn	Lys	Gly	Leu	Ala	Leu	Ile	Phe
				35					40					45

Cys	Ile	Leu	Gln	Ser	Leu	Ala	Leu	Thr	Trp	Tyr	Ser	Leu	Ser	Phe
				50					55					60

Ile	Pro	Phe	Ala	Arg	Asp	Ala	Val	Lys	Lys	Cys	Phe	Ala	Val	Cys
				65					70					75

Leu Ala

<210> 57

<211> 3334

<212> DNA

<213> Homo Sapien

<400> 57

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cccagaccga gttccagtac tttgagtcga aggggctccc tgccgagctg 150

aagtccattt tcaagctcag tgtcttcac cctcccagg aattctccac 200

ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250

atgggcagct agactttgaa gaatttgtcc attatctcca agatcatgag 300

aagaagctga ggctgggtgt taagattttg gacaaaaaga atgatggacg 350

cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400

tatctgaaca gcaggcagaa aaaattctca agagcatgga taaaaacggc 450

acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccaccc 500

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<210> 58

<211> 469

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln

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Thr Glu Phe Gln Tyr	Phe Glu Ser Lys	Gly Leu Pro Ala Glu	Leu
20		25	30
Lys Ser Ile Phe Lys	Leu Ser Val Phe	Ile Pro Ser Gln Glu	Phe
35		40	45
Ser Thr Tyr Arg Gln	Trp Lys Gln Lys	Ile Val Gln Ala Gly	Asp
50		55	60
Lys Asp Leu Asp Gly	Gln Leu Asp Phe	Glu Glu Phe Val His	Tyr
65		70	75
Leu Gln Asp His Glu	Lys Lys Leu Arg	Leu Val Phe Lys Ile	Leu
80		85	90
Asp Lys Lys Asn Asp	Gly Arg Ile Asp	Ala Gln Glu Ile Met	Gln
95		100	105
Ser Leu Arg Asp Leu	Gly Val Lys Ile	Ser Glu Gln Gln Ala	Glu
110		115	120
Lys Ile Leu Lys Ser	Met Asp Lys Asn	Gly Thr Met Thr Ile	Asp
125		130	135
Trp Asn Glu Trp Arg	Asp Tyr His Leu	Leu His Pro Val Glu	Asn
140		145	150
Ile Pro Glu Ile Ile	Leu Tyr Trp Lys	His Ser Thr Ile Phe	Asp
155		160	165
Val Gly Glu Asn Leu	Thr Val Pro Asp	Glu Phe Thr Val Glu	Glu
170		175	180
Arg Gln Thr Gly Met	Trp Trp Arg His	Leu Val Ala Gly Gly	Gly
185		190	195
Ala Gly Ala Val Ser	Arg Thr Cys Thr	Ala Pro Leu Asp Arg	Leu
200		205	210
Lys Val Leu Met Gln	Val His Ala Ser	Arg Ser Asn Asn Met	Gly
215		220	225
Ile Val Gly Gly Phe	Thr Gln Met Ile	Arg Glu Gly Gly Ala	Arg
230		235	240
Ser Leu Trp Arg Gly	Asn Gly Ile Asn	Val Leu Lys Ile Ala	Pro
245		250	255
Glu Ser Ala Ile Lys	Phe Met Ala Tyr	Glu Gln Ile Lys Arg	Leu
260		265	270
Val Gly Ser Asp Gln	Glu Thr Leu Arg	Ile His Glu Arg Leu	Val
275		280	285
Ala Gly Ser Leu Ala	Gly Ala Ile Ala	Gln Ser Ser Ile Tyr	Pro

290	295	300
Met Glu Val Leu Lys Thr Arg Met Ala	Leu Arg Lys Thr Gly Gln	
305	310	315
Tyr Ser Gly Met Leu Asp Cys Ala Arg	Arg Ile Leu Ala Arg Glu	
320	325	330
Gly Val Ala Ala Phe Tyr Lys Gly Tyr	Val Pro Asn Met Leu Gly	
335	340	345
Ile Ile Pro Tyr Ala Gly Ile Asp Leu	Ala Val Tyr Glu Thr Leu	
350	355	360
Lys Asn Ala Trp Leu Gln His Tyr Ala	Val Asn Ser Ala Asp Pro	
365	370	375
Gly Val Phe Val Leu Leu Ala Cys Gly	Thr Met Ser Ser Thr Cys	
380	385	390
Gly Gln Leu Ala Ser Tyr Pro Leu Ala	Leu Val Arg Thr Arg Met	
395	400	405
Gln Ala Gln Ala Ser Ile Glu Gly Ala	Pro Glu Val Thr Met Ser	
410	415	420
Ser Leu Phe Lys His Ile Leu Arg Thr	Glu Gly Ala Phe Gly Leu	
425	430	435
Tyr Arg Gly Leu Ala Pro Asn Phe Met	Lys Val Ile Pro Ala Val	
440	445	450
Ser Ile Ser Tyr Val Val Tyr Glu Asn	Leu Lys Ile Thr Leu Gly	
455	460	465
Val Gln Ser Arg		

<210> 59
 <211> 1658
 <212> DNA
 <213> Homo Sapien

<400> 59
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 gcatcatcat tattctggct ggagcaattg cactcatcat tggcttttgg 150
 atttcaggga gacactccat cacagtcact actgtcgcct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
 tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatggt 350

cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
ctttgcggt gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
tatatcatca cttctaaagg caaggggaat gctaaccttg agtataaaac 500
tggagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550
agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtgggc 600
tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac 650
cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
attgccaaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
gcggagtcac ctacagctgc taaactcaaa ggcttctctg tgtgtctctt 850
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ttctgggagg aaatgaattc atatctagaa gtctggagt agcaaacaag 1050
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tgtaatgttg ctctgaggaa gccctggaa agtctatccc aacatatcca 1350
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caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500
ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 60
<211> 282

<212> PRT

<213> Homo Sapien

<400> 60

Met	Ala	Ser	Leu	Gly	Gln	Ile	Leu	Phe	Trp	Ser	Ile	Ile	Ser	Ile	
1				5					10					15	
Ile	Ile	Ile	Leu	Ala	Gly	Ala	Ile	Ala	Leu	Ile	Ile	Gly	Phe	Gly	
				20					25					30	
Ile	Ser	Gly	Arg	His	Ser	Ile	Thr	Val	Thr	Thr	Val	Ala	Ser	Ala	
				35					40					45	
Gly	Asn	Ile	Gly	Glu	Asp	Gly	Ile	Leu	Ser	Cys	Thr	Phe	Glu	Pro	
				50					55					60	
Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly	
				65					70					75	
Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu	
				80					85					90	
Ser	Glu	Gln	Asp	Glu	Met	Phe	Arg	Gly	Arg	Thr	Ala	Val	Phe	Ala	
				95					100					105	
Asp	Gln	Val	Ile	Val	Gly	Asn	Ala	Ser	Leu	Arg	Leu	Lys	Asn	Val	
				110					115					120	
Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser	
				125					130					135	
Lys	Gly	Lys	Gly	Asn	Ala	Asn	Leu	Glu	Tyr	Lys	Thr	Gly	Ala	Phe	
				140					145					150	
Ser	Met	Pro	Glu	Val	Asn	Val	Asp	Tyr	Asn	Ala	Ser	Ser	Glu	Thr	
				155					160					165	
Leu	Arg	Cys	Glu	Ala	Pro	Arg	Trp	Phe	Pro	Gln	Pro	Thr	Val	Val	
				170					175					180	
Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser	
				185					190					195	
Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val	
				200					205					210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys	
				215					220					225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val	
				230					235					240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn	
				245					250					255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp	
				260					265					270	

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
 275 280

<210> 61
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 61
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 gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100
 ccccccaata gtggagggca gtatggtagt gggctacccc ctgggtggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctgggtggag 200
 ggccctatgg acaccccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagttcctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gcctaactct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcacgc atgtctacgg cttctcagcc 550
 ctgtggaaat tcatccagca gtggaagaac ctcttccagc agtatgaccg 600
 ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
 aaatgggcta caacctgagc ccccagttca cccagcttct ggtctcccgc 700
 tactgcccac gctctgcaa tcttgccatg cagcttgacc gtttcatcca 750
 ggtgtgcacc cagctgcagg tgctgacaga ggccttccgg gagaaggaca 800
 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
 acagcttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
 cagggacctt tcttggttc ttagagtgag agaagtatgt ggacatctct 950
 tcttttctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
 gttccaaaag aggggtggaga gtctgcac atagccacca aatagtgagg 1050
 accggggctg aggccacaca gataggggcc tgatggagga gaggatagaa 1100
 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
 ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200

tgatgccagt ggtgagtgtt catcggcctg ttaccgttag tacctgtgtt 1250
 ccctcaccag gccatcctgt caaacgagcc cattttctcc aaagtggaat 1300
 ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
 gccacacca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
 cctgcagctg ggacccctca cttgcctgcc atgctctgct cggettcaagt 1500
 ctccaggaga cagtggtcac ctctccctgc caatactttt tttaatttgc 1550
 attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 62

<211> 284

<212> PRT

<213> Homo Sapien

<400> 62

Met	Ala	Ser	Tyr	Pro	Tyr	Arg	Gln	Gly	Cys	Pro	Gly	Ala	Ala	Gly	1	5	10	15
Gln	Ala	Pro	Gly	Ala	Pro	Pro	Gly	Ser	Tyr	Tyr	Pro	Gly	Pro	Pro	20	25	30	
Asn	Ser	Gly	Gly	Gln	Tyr	Gly	Ser	Gly	Leu	Pro	Pro	Gly	Gly	Gly	35	40	45	
Tyr	Gly	Gly	Pro	Ala	Pro	Gly	Gly	Pro	Tyr	Gly	Pro	Pro	Ala	Gly	50	55	60	
Gly	Gly	Pro	Tyr	Gly	His	Pro	Asn	Pro	Gly	Met	Phe	Pro	Ser	Gly	65	70	75	
Thr	Pro	Gly	Gly	Pro	Tyr	Gly	Gly	Ala	Ala	Pro	Gly	Gly	Pro	Tyr	80	85	90	
Gly	Gln	Pro	Pro	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Gln	Pro	Gly	Leu	95	100	105	
Tyr	Gly	Gln	Gly	Gly	Ala	Pro	Pro	Asn	Val	Asp	Pro	Glu	Ala	Tyr	110	115	120	
Ser	Trp	Phe	Gln	Ser	Val	Asp	Ser	Asp	His	Ser	Gly	Tyr	Ile	Ser	125	130	135	
Met	Lys	Glu	Leu	Lys	Gln	Ala	Leu	Val	Asn	Cys	Asn	Trp	Ser	Ser	140	145	150	
Phe	Asn	Asp	Glu	Thr	Cys	Leu	Met	Met	Ile	Asn	Met	Phe	Asp	Lys	155	160	165	

Thr	Lys	Ser	Gly	Arg	Ile	Asp	Val	Tyr	Gly	Phe	Ser	Ala	Leu	Trp
				170					175					180
Lys	Phe	Ile	Gln	Gln	Trp	Lys	Asn	Leu	Phe	Gln	Gln	Tyr	Asp	Arg
				185					190					195
Asp	Arg	Ser	Gly	Ser	Ile	Ser	Tyr	Thr	Glu	Leu	Gln	Gln	Ala	Leu
				200					205					210
Ser	Gln	Met	Gly	Tyr	Asn	Leu	Ser	Pro	Gln	Phe	Thr	Gln	Leu	Leu
				215					220					225
Val	Ser	Arg	Tyr	Cys	Pro	Arg	Ser	Ala	Asn	Pro	Ala	Met	Gln	Leu
				230					235					240
Asp	Arg	Phe	Ile	Gln	Val	Cys	Thr	Gln	Leu	Gln	Val	Leu	Thr	Glu
				245					250					255
Ala	Phe	Arg	Glu	Lys	Asp	Thr	Ala	Val	Gln	Gly	Asn	Ile	Arg	Leu
				260					265					270
Ser	Phe	Glu	Asp	Phe	Val	Thr	Met	Thr	Ala	Ser	Arg	Met	Leu	
				275					280					

<210> 63
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 63
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 gaggagaaag tttcccaaaa cttcgggacc aacttgctc agctcggaca 150
 accttccctc actggccct ctaactctga acatccgcag cccgctctgg 200
 accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250
 ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300
 tccatcgtgg gggctgctg ccatggattc ctggccccct gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgtgcct 400
 gaagaactct cttacctctc cagtgtgcg gccctcgctc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550
 tcaactgggag ccgggggaaa aatcctttcc caacgccctc cctgggtctt 600
 catccacagg gttctgcctg atcaccctg gggtagcctg aatcccagt 650
 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggcccatg 700

ccacaccctg aggggaatctg ggggtatcaat aatcaacccc caggtaccag 750
 ctgggggaaat attaatcggt atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg ggggaatatta atcggtatcc aggaggcagc 850
 tgggggaata ttcatttata cccagggtatc aataacccat ttcctcctgg 900
 agttctccgc cctcctgggt cttcttggaa catcccagct ggcttcccta 950
 atcctccaag ccctaggttg cagtggggct agagcacgat agagggaac 1000
 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtgggctca 1050
 atccaggccc tgtaacatg tttccagcac tatccccact tttcagtgcc 1100
 tcccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
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 1 5 10 15
 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75
 Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
 80 85 90
 Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
 95 100 105
 Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
 110 115 120
 Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
 125 130 135
 Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
 140 145 150

Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu
				155					160					165
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg
				170					175					180
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro
				185					190					195
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly
				200					205					210
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr
				215					220					225
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly
				230					235					240
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg
				245					250					255
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly
				260					265					270
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn
				275					280					285
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val
				290					295					300
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro
				305					310					315
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly					
				320					325					

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
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 ggccactatg gggctctgggc tgccccttgt cctcctcttg accctccttg 100
 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgctctctcc tccatctccc ttcagggacc agcgtcacc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtctctctt ggcccgggct tttgggccgg ggatgcagga 350
 ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400

ataaataaaaa ttcggtatgc tg 422

<210> 66

<211> 78

<212> PRT

<213> Homo Sapien

<400> 66

Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
1 5 10 15

Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
20 25 30

Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
35 40 45

Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
50 55 60

Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
65 70 75

Cys Asn Thr

<210> 67

<211> 744

<212> DNA

<213> Homo Sapien

<400> 67

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caaagacgcc cgggccaggt gccccgtcgc aggtgcccct ggccggagat 100

gcggtaggag gggcgagcgc gagaagcccc ttctctggcg ctgccaaacc 150

gccacccagc ccatggcgaa ccccgggctg gggctgcttc tggcgctggg 200

cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250

ccactttctgc aaatgagaat agcactgttt tgccttcata caccagctcc 300

agctccgatg gcaacctgcg tccggaagcc atcactgcta tcactgttgt 350

cttctccctc ttggetgcct tgctcctggc tgtggggctg gcactgttgg 400

tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggcccagt 450

agcgaggagc agttctccca tgcagccgag gcccgggccc ctcaggactc 500

caaggagacg gtgcaggggt gcctgcccac ctaggtcccc tctcctgcat 550

ctgtctccct tcattgctgt gtgaccttgg ggaaaggcag tgccctctct 600

gggcagtcag atccaccag tgcttaatag cagggaagaa ggtacttcaa 650

agactctgcc cctgaggtca agagaggatg gggctattca cttttatata 700

tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68

<211> 123

<212> PRT

<213> Homo Sapien

<400> 68

Met	Ala	Asn	Pro	Gly	Leu	Gly	Leu	Leu	Leu	Ala	Leu	Gly	Leu	Pro
1				5					10					15

Phe	Leu	Leu	Ala	Arg	Trp	Gly	Arg	Ala	Trp	Gly	Gln	Ile	Gln	Thr
			20						25					30

Thr	Ser	Ala	Asn	Glu	Asn	Ser	Thr	Val	Leu	Pro	Ser	Ser	Thr	Ser
			35						40					45

Ser	Ser	Ser	Asp	Gly	Asn	Leu	Arg	Pro	Glu	Ala	Ile	Thr	Ala	Ile
			50						55					60

Ile	Val	Val	Phe	Ser	Leu	Leu	Ala	Ala	Leu	Leu	Leu	Ala	Val	Gly
			65						70					75

Leu	Ala	Leu	Leu	Val	Arg	Lys	Leu	Arg	Glu	Lys	Arg	Gln	Thr	Glu
			80						85					90

Gly	Thr	Tyr	Arg	Pro	Ser	Ser	Glu	Glu	Gln	Phe	Ser	His	Ala	Ala
			95						100					105

Glu	Ala	Arg	Ala	Pro	Gln	Asp	Ser	Lys	Glu	Thr	Val	Gln	Gly	Cys
			110						115					120

Leu Pro Ile

<210> 69

<211> 3265

<212> DNA

<213> Homo Sapien

<400> 69

gccaggaata actagagagg aacaatgggg ttattcagag gttttgtttt 50
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100

tgaataataa tggctttgaa gatattgtca ttgttataga tcctagtgtg 150

ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200

ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250

tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300

ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
 agaaaggcga atacattcac ttcacccctg accttctact tggaaaaaaa 450
 caaaatgaat atggaccacc aggcaaactg tttgtccatg agtgggctca 500
 cctccggtgg ggagtgtttg atgagtacaa tgaagatcag cctttctacc 550
 gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
 ggtagaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650
 atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700
 ttcttgataa agtacaacaa gaaaaagcat ccataatgtt tatgcaaagt 750
 attgattctg ttgttgaatt ttgtaacgaa aaaaccata atcaagaagc 800
 tccaagccta caaaacataa agtgcaattt tagaagtaca tgggaggtga 850
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 cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950
 agttcttgat aagtctggaa gcatgggggg taaggaccgc ctaaatacga 1000
 tgaatcaagc agcaaaacat ttcctgctgc agactgttga aaatggatcc 1050
 tgggtgggga tggttcactt tgatagtact gccactattg taaataagct 1100
 aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150
 ctacatatcc tctgggagga acttccatct gctctggaat taaatatgca 1200
 tttcaggtga ttggagagct acattcccaa ctcgatggat ccgaagtact 1250
 gctgctgact gatggggagg ataacactgc aagttcttgt attgatgaag 1300
 tgaaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350
 gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400
 tgtttcagat gaagctcaga acaatggcct cattgatgct tttggggctc 1450
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 aagggattaa cactgaatag taatgcctgg atgaacgaca ctgtcataat 1550
 tgatagtaca gtgggaaagg acacgttctt tctcatcaca tggaacagtc 1600
 tgctccag tatttctctc tgggatccca gtggaacaat aatggaaaat 1650
 ttcacagtgg atgcaacttc caaaatggcc tatctcagta ttccaggaac 1700
 tgcaaagggt ggcaacttggg catacaatct tcaagccaaa gcgaaccag 1750
 aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgct 1800

ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttccccag 1850
 cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900
 gagccaatgt gactgctttc attgaatcac agaattggaca tacagaagtt 1950
 ttggaacttt tggataatgg tgcaggcgct gattctttca agaattgatgg 2000
 agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050
 taaaagtctg ggctcatgga ggagcaaaca ctgccaggct aaaattacgg 2100
 cctccactga atagagccgc gtacatacca ggctgggtag tgaacgggga 2150
 aattgaagca aacccgccaa gacctgaaat tgatgaggat actcagacca 2200
 ccttggagga tttcagccga acagcatccg gaggtgcatt tgtggtatca 2250
 caagtcccaa gccttcctt gcctgaccaa taccaccaa gtcaaatac 2300
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 caccaggaga taattttgat gttggaaaag ttcaacgtta tatcataaga 2400
 ataagtcaa gtattcttga tctaagagac agttttgatg atgctcttca 2450
 agtaaatact actgatctgt caccaaagga ggccaactcc aaggaaagct 2500
 ttgcatttaa accagaaaat atctcagaag aaaatgcaac ccacatattt 2550
 attgccatta aaagtataga taaaagcaat ttgacatcaa aagtatccaa 2600
 cattgcacaa gtaactttgt ttatccctca agcaaactct gatgacattg 2650
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 gtaaaggata tttctgaatc ttaaaattca tcccatgtgt gatcataaac 2900
 tcataaaaat aattttaaga tgtcggaaaa ggatactttg attaaataaa 2950
 aacactcatg gatatgtaaa aactgtcaag attaaaattt aatagtttca 3000
 tttatttggt attttatttg taagaaatag tgatgaacaa agatcctttt 3050
 tcatactgat acctggttgt atattatttg atgcaacagt tttctgaaat 3100
 gatatttcaa attgcatcaa gaaattaaaa tcatctatct gagtagtcaa 3150
 aatacaagta aaggagagca aataaacaac atttgaaaa aaaaaaaaaa 3200

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250

aaaaaaaaaa aaaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met	Gly	Leu	Phe	Arg	Gly	Phe	Val	Phe	Leu	Leu	Val	Leu	Cys	Leu	
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Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly	
				20					25					30	
Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp	
				35					40					45	
Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser	
				50					55					60	
Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn	
				65					70					75	
Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr	
				80					85					90	
Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val	
				95					100					105	
Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln	
				110					115					120	
Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro	
				125					130					135	
Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly	
				140					145					150	
Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	
				155					160					165	
Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys	
				170					175					180	
Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn	
				185					190					195	
Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys	
				200					205					210	
Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe	
				215					220					225	
Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met	
				230					235					240	

Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His	245	250	255
Asn Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg	260	265	270
Ser Thr Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr	275	280	285
Ile Pro Met Val Thr Pro Pro Pro Pro Pro Val Phe Ser Leu Leu	290	295	300
Lys Ile Ser Gln Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly	305	310	315
Ser Met Gly Gly Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala	320	325	330
Lys His Phe Leu Leu Gln Thr Val Glu Asn Gly Ser Trp Val Gly	335	340	345
Met Val His Phe Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile	350	355	360
Gln Ile Lys Ser Ser Asp Glu Arg Asn Thr Leu Met Ala Gly Leu	365	370	375
Pro Thr Tyr Pro Leu Gly Gly Thr Ser Ile Cys Ser Gly Ile Lys	380	385	390
Tyr Ala Phe Gln Val Ile Gly Glu Leu His Ser Gln Leu Asp Gly	395	400	405
Ser Glu Val Leu Leu Leu Thr Asp Gly Glu Asp Asn Thr Ala Ser	410	415	420
Ser Cys Ile Asp Glu Val Lys Gln Ser Gly Ala Ile Val His Phe	425	430	435
Ile Ala Leu Gly Arg Ala Ala Asp Glu Ala Val Ile Glu Met Ser	440	445	450
Lys Ile Thr Gly Gly Ser His Phe Tyr Val Ser Asp Glu Ala Gln	455	460	465
Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Thr Ser Gly Asn	470	475	480
Thr Asp Leu Ser Gln Lys Ser Leu Gln Leu Glu Ser Lys Gly Leu	485	490	495
Thr Leu Asn Ser Asn Ala Trp Met Asn Asp Thr Val Ile Ile Asp	500	505	510
Ser Thr Val Gly Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn Ser	515	520	525

Leu Pro Pro Ser	Ile Ser Leu Trp Asp	Pro Ser Gly Thr Ile Met
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Glu Asn Phe Thr	Val Asp Ala Thr Ser	Lys Met Ala Tyr Leu Ser
545	550	555
Ile Pro Gly Thr	Ala Lys Val Gly Thr	Trp Ala Tyr Asn Leu Gln
560	565	570
Ala Lys Ala Asn	Pro Glu Thr Leu Thr	Ile Thr Val Thr Ser Arg
575	580	585
Ala Ala Asn Ser	Ser Val Pro Pro Ile	Thr Val Asn Ala Lys Met
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Asn Lys Asp Val	Asn Ser Phe Pro Ser	Pro Met Ile Val Tyr Ala
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620	625	630
Ala Phe Ile Glu	Ser Gln Asn Gly His	Thr Glu Val Leu Glu Leu
635	640	645
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Tyr Ser Arg Tyr	Phe Thr Ala Tyr Thr	Glu Asn Gly Arg Tyr Ser
665	670	675
Leu Lys Val Arg	Ala His Gly Gly Ala	Asn Thr Ala Arg Leu Lys
680	685	690
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695	700	705
Val Asn Gly Glu	Ile Glu Ala Asn Pro	Pro Arg Pro Glu Ile Asp
710	715	720
Glu Asp Thr Gln	Thr Thr Leu Glu Asp	Phe Ser Arg Thr Ala Ser
725	730	735
Gly Gly Ala Phe	Val Val Ser Gln Val	Pro Ser Leu Pro Leu Pro
740	745	750
Asp Gln Tyr Pro	Pro Ser Gln Ile Thr	Asp Leu Asp Ala Thr Val
755	760	765
His Glu Asp Lys	Ile Ile Leu Thr Trp	Thr Ala Pro Gly Asp Asn
770	775	780
Phe Asp Val Gly	Lys Val Gln Arg Tyr	Ile Ile Arg Ile Ser Ala
785	790	795
Ser Ile Leu Asp	Leu Arg Asp Ser Phe	Asp Asp Ala Leu Gln Val
800	805	810

Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser	
				815					820					825	
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His	
				830					835					840	
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser	
				845					850					855	
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala	
				860					865					870	
Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro	
				875					880					885	
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu	
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Ser Thr Thr Ile

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 <211> 3877
 <212> DNA
 <213> Homo Sapien

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 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
 50 55 60
 Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
 65 70 75
 Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
 80 85 90
 Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
 95 100 105
 Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
 110 115 120
 Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
 125 130 135
 Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
 140 145 150
 Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
 155 160 165
 His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
 170 175 180
 Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala

	185		190		195
Glu Asn Ser Pro	Asn His Arg Pro Tyr	Thr Ala Ser Asp Phe	Ile		
	200	205	210		
Glu Gly Ile Tyr	Arg Thr Glu Arg Asp	Lys Gly Thr Leu Tyr	Glu		
	215	220	225		
Leu Thr Phe Lys	Gly Asp His Lys His	Glu Phe Lys Arg Leu	Ile		
	230	235	240		
Leu Phe Arg Pro	Phe Ser Pro Ile Met	Lys Val Lys Asn Glu	Lys		
	245	250	255		
Leu Asn Met Ala	Asn Thr Leu Ile Asn	Val Ile Val Pro Leu	Ala		
	260	265	270		
Lys Arg Val Asp	Lys Phe Arg Gln Phe	Met Gln Asn Phe Arg	Glu		
	275	280	285		
Met Cys Ile Glu	Gln Asp Gly Arg Val	His Leu Thr Val Val	Tyr		
	290	295	300		
Phe Gly Lys Glu	Glu Ile Asn Glu Val	Lys Gly Ile Leu Glu	Asn		
	305	310	315		
Thr Ser Lys Ala	Ala Asn Phe Arg Asn	Phe Thr Phe Ile Gln	Leu		
	320	325	330		
Asn Gly Glu Phe	Ser Arg Gly Lys Gly	Leu Asp Val Gly Ala	Arg		
	335	340	345		
Phe Trp Lys Gly	Ser Asn Val Leu Leu	Phe Phe Cys Asp Val	Asp		
	350	355	360		
Ile Tyr Phe Thr	Ser Glu Phe Leu Asn	Thr Cys Arg Leu Asn	Thr		
	365	370	375		
Gln Pro Gly Lys	Lys Val Phe Tyr Pro	Val Leu Phe Ser Gln	Tyr		
	380	385	390		
Asn Pro Gly Ile	Ile Tyr Gly His His	Asp Ala Val Pro Pro	Leu		
	395	400	405		
Glu Gln Gln Leu	Val Ile Lys Lys Glu	Thr Gly Phe Trp Arg	Asp		
	410	415	420		
Phe Gly Phe Gly	Met Thr Cys Gln Tyr	Arg Ser Asp Phe Ile	Asn		
	425	430	435		
Ile Gly Gly Phe	Asp Leu Asp Ile Lys	Gly Trp Gly Gly Glu	Asp		
	440	445	450		
Val His Leu Tyr	Arg Lys Tyr Leu His	Ser Asn Leu Ile Val	Val		
	455	460	465		
Arg Thr Pro Val	Arg Gly Leu Phe His	Leu Trp His Glu Lys	Arg		

470	475	480
Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln		
485	490	495
Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu		
500	505	510
Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln		
515	520	525
Lys Thr Ser Ser Lys Lys Thr		
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<211> 337

<212> PRT

<213> Homo Sapien

<400> 74

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Ala	Asp	Gly	Gly	Gln	His	Trp	Thr	Tyr	Glu	Gly	Pro	His	Gly	Gln
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Asp	His	Trp	Pro	Ala	Ser	Tyr	Pro	Glu	Cys	Gly	Asn	Asn	Ala	Gln
				35				40					45	
Ser	Pro	Ile	Asp	Ile	Gln	Thr	Asp	Ser	Val	Thr	Phe	Asp	Pro	Asp
				50				55					60	
Leu	Pro	Ala	Leu	Gln	Pro	His	Gly	Tyr	Asp	Gln	Pro	Gly	Thr	Glu
				65				70					75	

Pro	Leu	Asp	Leu	His	Asn	Asn	Gly	His	Thr	Val	Gln	Leu	Ser	Leu			80	85	90
Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala			95	100	105
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly			110	115	120
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His			125	130	135
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala			140	145	150
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu			155	160	165
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His			170	175	180
Leu	His	Glu	Val	Arg	His	Lys	Asp	Gln	Lys	Thr	Ser	Val	Pro	Pro			185	190	195
Phe	Asn	Leu	Arg	Glu	Leu	Leu	Pro	Lys	Gln	Leu	Gly	Gln	Tyr	Phe			200	205	210
Arg	Tyr	Asn	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Tyr	Gln	Ser	Val			215	220	225
Leu	Trp	Thr	Val	Phe	Tyr	Arg	Arg	Ser	Gln	Ile	Ser	Met	Glu	Gln			230	235	240
Leu	Glu	Lys	Leu	Gln	Gly	Thr	Leu	Phe	Ser	Thr	Glu	Glu	Glu	Pro			245	250	255
Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn			260	265	270
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr			275	280	285
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly			290	295	300
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile			305	310	315
Arg	Lys	Lys	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Val	Val	Phe	Thr	Ser			320	325	330
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<210> 75
 <211> 1743
 <212> DNA

<213> Homo Sapien

<400> 75

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<210> 76

<211> 442

<212> PRT

<213> Homo Sapien

<400> 76

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Val	Ala	Leu	Thr	Thr	Asp	Glu	Lys	Ser	Ile	Ser	Val	Val	Leu	Thr	35	40	45	
Ala	Pro	Glu	Lys	Trp	Lys	Arg	Asn	Pro	Glu	Asp	Leu	Pro	Val	Ser	50	55	60	
Met	Gln	Gln	Ile	Tyr	Ser	Asn	Leu	Lys	Tyr	Asn	Val	Ser	Val	Leu	65	70	75	
Asn	Thr	Lys	Ser	Asn	Arg	Thr	Trp	Ser	Gln	Cys	Val	Thr	Asn	His	80	85	90	
Thr	Leu	Val	Leu	Thr	Trp	Leu	Glu	Pro	Asn	Thr	Leu	Tyr	Cys	Val	95	100	105	
His	Val	Glu	Ser	Phe	Val	Pro	Gly	Pro	Pro	Arg	Arg	Ala	Gln	Pro	110	115	120	
Ser	Glu	Lys	Gln	Cys	Ala	Arg	Thr	Leu	Lys	Asp	Gln	Ser	Ser	Glu	125	130	135	
Phe	Lys	Ala	Lys	Ile	Ile	Phe	Trp	Tyr	Val	Leu	Pro	Ile	Ser	Ile	140	145	150	
Thr	Val	Phe	Leu	Phe	Ser	Val	Met	Gly	Tyr	Ser	Ile	Tyr	Arg	Tyr	155	160	165	
Ile	His	Val	Gly	Lys	Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile	170	175	180	

Tyr	Gly	Asn	Glu	Phe	Asp	Lys	Arg	Phe	Phe	Val	Pro	Ala	Glu	Lys	185	190	195
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Ile	Ser	His	Gln	Asp	Met	Ser	Leu	Leu	Gly	Lys	Ser	Ser	Asp	Val	215	220	225
Ser	Ser	Leu	Asn	Asp	Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro	230	235	240
Gln	Glu	Glu	Glu	Glu	Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu	245	250	255
Met	Glu	Ile	Phe	Cys	Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser	260	265	270
Leu	Thr	Gln	Gln	Glu	Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys	275	280	285
Thr	Val	Ile	Glu	Tyr	Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys	290	295	300
Ala	Gly	Pro	Glu	Glu	Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser	305	310	315
Thr	Gln	Gly	Thr	Leu	Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	320	325	330
Gly	Pro	Gln	Thr	Leu	Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp	335	340	345
Leu	Asp	Pro	Leu	Ala	Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro	350	355	360
Glu	Glu	Glu	Pro	Ser	Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	365	370	375
Gly	Arg	Leu	Cys	Ile	Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser	380	385	390
Glu	Gly	Cys	Glu	Pro	Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly	395	400	405
Leu	Leu	Ser	Arg	Leu	Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro	410	415	420
Gly	Glu	Asn	Glu	Thr	Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly	425	430	435
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<210> 77
 <211> 1636
 <212> DNA

<213> Homo Sapien

<400> 77

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<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
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35 40 45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
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Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

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				215					220					225
Ser	Ile	Asp	Arg	Leu	Glu	Phe	Asp	Leu	Leu	Tyr	Pro	Ala	Ile	Lys
				230					235					240
Gly	Asp	Thr	Ile	Gln	Leu	Tyr	Leu	Gly	Ala	Lys	Leu	Leu	Asp	Ser
				245					250					255
Gln	Gly	Lys	Val	Thr	Lys	Trp	Phe	Asn	Asn	Ser	Ala	Ala	Ser	Leu
				260					265					270
Thr	Met	Pro	Thr	Leu	Asp	Asn	Ile	Pro	Phe	Ser	Leu	Ile	Val	Ser
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Gln	Asp	Val	Val	Lys	Ala	Ala	Val	Ala	Ala	Val	Leu	Ser	Pro	Glu
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Glu	Phe	Met	Val	Leu	Leu	Asp	Ser	Val	Leu	Pro	Glu	Ser	Ala	His
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Arg	Leu	Lys	Ser	Ser	Ile	Gly	Leu	Ile	Asn	Glu	Lys	Ala	Ala	Asp
				320					325					330
Lys	Leu	Gly	Ser	Thr	Gln	Ile	Val	Lys	Ile	Leu	Thr	Gln	Asp	Thr
				335					340					345
Pro	Glu	Phe	Phe	Ile	Asp	Gln	Gly	His	Ala	Lys	Val	Ala	Gln	Leu
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Ile	Val	Leu	Glu	Val	Phe	Pro	Ser	Ser	Glu	Ala	Leu	Arg	Pro	Leu
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Phe	Thr	Leu	Gly	Ile	Glu	Ala	Ser	Ser	Glu	Ala	Gln	Phe	Tyr	Thr
				380					385					390
Lys	Gly	Asp	Gln	Leu	Ile	Leu	Asn	Leu	Asn	Asn	Ile	Ser	Ser	Asp
				395					400					405
Arg	Ile	Gln	Leu	Met	Asn	Ser	Gly	Ile	Gly	Trp	Phe	Gln	Pro	Asp
				410					415					420
Val	Leu	Lys	Asn	Ile	Ile	Thr	Glu	Ile	Ile	His	Ser	Ile	Leu	Leu
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Pro	Asn	Gln	Asn	Gly	Lys	Leu	Arg	Ser	Gly	Val	Pro	Val	Ser	Leu
				440					445					450
Val	Lys	Ala	Leu	Gly	Phe	Glu	Ala	Ala	Glu	Ser	Ser	Leu	Thr	Lys
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<210> 79
<211> 1475
<212> DNA
<213> Homo Sapien

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<210> 80
<211> 230
<212> PRT
<213> Homo Sapien

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35 40 45
Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
50 55 60
Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
65 70 75
Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
80 85 90
Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
95 100 105
Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
110 115 120
Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
125 130 135
Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150
Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165
Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180
Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195
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<210> 81

<211> 1732

<212> DNA

<213> Homo Sapien

<400> 81

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<210> 82

<211> 451

<212> PRT

<213> Homo Sapien

<400> 82

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Leu	Leu	Trp	Phe	Pro	Leu	Asp	Ser	His	Ala	Arg	Ala	Arg	Pro	Asp
				20					25					30

Met	Phe	Cys	Leu	Phe	His	Gly	Lys	Arg	Tyr	Ser	Pro	Gly	Glu	Ser
				35					40					45

Trp	His	Pro	Tyr	Leu	Glu	Pro	Gln	Gly	Leu	Met	Tyr	Cys	Leu	Arg
				50					55					60

Cys	Thr	Cys	Ser	Glu	Gly	Ala	His	Val	Ser	Cys	Tyr	Arg	Leu	His
				65					70					75

Cys	Pro	Pro	Val	His	Cys	Pro	Gln	Pro	Val	Thr	Glu	Pro	Gln	Gln
				80					85					90

Cys	Cys	Pro	Lys	Cys	Val	Glu	Pro	His	Thr	Pro	Ser	Gly	Leu	Arg
				95					100					105

Ala	Pro	Pro	Lys	Ser	Cys	Gln	His	Asn	Gly	Thr	Met	Tyr	Gln	His
				110					115					120

Gly	Glu	Ile	Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro
				125					130					135

Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys		140	145	150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro		155	160	165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu		170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg		185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly		200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe		215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val		230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly		245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg		260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly		275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys		290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro		305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg		320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser		335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala		350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu		365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His		380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala		395	400	405
Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro		410	415	420

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Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
 440 445 450

Thr

<210> 83

<211> 2052

<212> DNA

<213> Homo Sapien

<400> 83

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<210> 84

<211> 500

<212> PRT

<213> Homo Sapien

<400> 84

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Ser	Gly	Gln	Trp	Gln	Val	Phe	Gly	Pro	Asp	Lys	Pro	Val	Gln	Ala
				20					25					30

Leu	Val	Gly	Glu	Asp	Ala	Ala	Phe	Ser	Cys	Phe	Leu	Ser	Pro	Lys
				35					40					45

Thr	Asn	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Gly	Gln	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50					55					60				
Ser	Ser	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Lys	Asp	Gln	Pro	Phe
				65					70					75
Met	Gln	Met	Pro	Gln	Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp
				80					85					90
Ser	Ile	Ala	Glu	Gly	Arg	Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr
				95					100					105
Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser
				110					115					120
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly
				125					130					135
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile
				140					145					150
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg
				170					175					180
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu
				185					190					195
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His
				200					205					210
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp
				215					220					225
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu
				230					235					240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys
				245					250					255
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro
				305					310					315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val
				320					325					330
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val

335	340	345
Asp Gly Gly His	Asn Lys Arg Trp Arg	Val Gly Val Cys Arg Asp
350	355	360
Asp Val Asp Arg	Arg Lys Glu Tyr Val	Thr Leu Ser Pro Asp His
365	370	375
Gly Tyr Trp Val	Leu Arg Leu Asn Gly	Glu His Leu Tyr Phe Thr
380	385	390
Leu Asn Pro Arg	Phe Ile Ser Val Phe	Pro Arg Thr Pro Pro Thr
395	400	405
Lys Ile Gly Val	Phe Leu Asp Tyr Glu	Cys Gly Thr Ile Ser Phe
410	415	420
Phe Asn Ile Asn	Asp Gln Ser Leu Ile	Tyr Thr Leu Thr Cys Arg
425	430	435
Phe Glu Gly Leu	Leu Arg Pro Tyr Ile	Glu Tyr Pro Ser Tyr Asn
440	445	450
Glu Gln Asn Gly	Thr Pro Ile Val Ile	Cys Pro Val Thr Gln Glu
455	460	465
Ser Glu Lys Glu	Ala Ser Trp Gln Arg	Ala Ser Ala Ile Pro Glu
470	475	480
Thr Ser Asn Ser	Glu Ser Ser Ser Gln	Ala Thr Thr Pro Phe Leu
485	490	495
Pro Arg Gly Glu Met		
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<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
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<210> 86
 <211> 463
 <212> PRT
 <213> Homo Sapien

<400> 86

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				20					25					30	
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	
				35					40					45	
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	
				50					55					60	
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	
				65					70					75	
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg	
				80					85					90	
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser	
				95					100					105	
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	
				110					115					120	
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	
				125					130					135	
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	
				140					145					150	
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	
				155					160					165	
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	
				170					175					180	
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	
				185					190					195	
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser	
				200					205					210	
Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn	
				215					220					225	
Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr	
				230					235					240	
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly	
				245					250					255	
Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu	
				260					265					270	
Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu	
				275					280					285	

Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser	
				290					295					300	
Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Ala	
				305					310					315	
Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln	
				320					325					330	
Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val	
				335					340					345	
Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe	
				350					355					360	
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys	
				365					370					375	
Lys	Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val	Gly	Asp	Thr	Gly	Ile	Glu	
				380					385					390	
Asp	Ala	Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser	Gln	Gly	Pro	Leu	Thr	
				395					400					405	
Glu	Pro	Trp	Ala	Glu	Asp	Ser	Pro	Pro	Asp	Gln	Pro	Pro	Pro	Ala	
				410					415					420	
Ser	Ala	Arg	Ser	Ser	Val	Gly	Glu	Gly	Glu	Leu	Gln	Tyr	Ala	Ser	
				425					430					435	
Leu	Ser	Phe	Gln	Met	Val	Lys	Pro	Trp	Asp	Ser	Arg	Gly	Gln	Glu	
				440					445					450	
Ala	Thr	Asp	Thr	Glu	Tyr	Ser	Glu	Ile	Lys	Ile	His	Arg			
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<210> 87

<211> 1176

<212> DNA

<213> Homo Sapien

<400> 87

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<210> 88

<211> 313

<212> PRT

<213> Homo Sapien

<400> 88

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Gly	Trp	Ser	Thr	Asp	Glu	Ala	Asn	Thr	Tyr	Phe	Lys	Glu	Trp	Thr
				20					25					30
Cys	Ser	Ser	Ser	Pro	Ser	Leu	Pro	Arg	Ser	Cys	Lys	Glu	Ile	Lys
				35					40					45
Asp	Glu	Cys	Pro	Ser	Ala	Phe	Asp	Gly	Leu	Tyr	Phe	Leu	Arg	Thr
				50					55					60
Glu	Asn	Gly	Val	Ile	Tyr	Gln	Thr	Phe	Cys	Asp	Met	Thr	Ser	Gly
				65					70					75
Gly	Gly	Gly	Trp	Thr	Leu	Val	Ala	Ser	Val	His	Glu	Asn	Asp	Met
				80					85					90

Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly	95	100	105
Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr	110	115	120
Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys	125	130	135
Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp	140	145	150
His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser	155	160	165
Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly	170	175	180
His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Gly	185	190	195
Glu Gly Lys Cys Trp Thr Asp Asn Gly Pro Val Ile Pro Val Val	200	205	210
Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser Pro	215	220	225
Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val	230	235	240
Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg	245	250	255
Val Thr Gly Cys Asn Thr Glu His His Cys Ile Gly Gly Gly Gly	260	265	270
Tyr Phe Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly	275	280	285
Phe Asp Trp Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser	290	295	300
Arg Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr Arg	305	310	

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

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<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
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 20 25 30
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 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
 95 100 105
 Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
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125

130

135

Lys Lys Lys Pro Phe
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

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gcgggggccac atctcaccta agtccccccc catggccaat tccactctcc 250
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131

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<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

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Glu	Asp	Pro	Glu	Arg	Asp	Asp	His	Glu	Gly	Gln	Pro	Arg	Pro	Arg	35	40	45	
Val	Pro	Arg	Lys	Arg	Gly	His	Ile	Ser	Pro	Lys	Ser	Arg	Pro	Met	50	55	60	
Ala	Asn	Ser	Thr	Leu	Leu	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Glu	Ala	65	70	75	
Trp	Gly	Ile	Leu	Gly	Gln	Pro	Pro	Asn	Arg	Pro	Asn	His	Ser	Pro	80	85	90	
Pro	Pro	Ser	Ala	Lys	Val	Lys	Lys	Ile	Phe	Gly	Trp	Gly	Asp	Phe	95	100	105	
Tyr	Ser	Asn	Ile	Lys	Thr	Val	Ala	Leu	Asn	Leu	Leu	Val	Thr	Gly	110	115	120	

Lys	Ile	Val	Asp	His	Gly	Asn	Gly	Thr	Phe	Ser	Val	His	Phe	Gln
				125					130					135
His	Asn	Ala	Thr	Gly	Gln	Gly	Asn	Ile	Ser	Ile	Ser	Leu	Val	Pro
				140					145					150
Pro	Ser	Lys	Ala	Val	Glu	Phe	His	Gln	Glu	Gln	Gln	Ile	Phe	Ile
				155					160					165
Glu	Ala	Lys	Ala	Ser	Lys	Ile	Phe	Asn	Cys	Arg	Met	Glu	Trp	Glu
				170					175					180
Lys	Val	Glu	Arg	Gly	Arg	Arg	Thr	Ser	Leu	Cys	Thr	His	Asp	Pro
				185					190					195
Ala	Lys	Ile	Cys	Ser	Arg	Asp	His	Ala	Gln	Ser	Ser	Ala	Thr	Trp
				200					205					210
Ser	Cys	Ser	Gln	Pro	Phe	Lys	Val	Val	Cys	Val	Tyr	Ile	Ala	Phe
				215					220					225
Tyr	Ser	Thr	Asp	Tyr	Arg	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr
				230					235					240
Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Tyr	Pro	Ser	Gly			
				245					250					

<210> 93

<211> 902

<212> DNA

<213> Homo Sapien

<400> 93

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 ta 902

<210> 94
 <211> 257
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
 50 55 60
 Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
 65 70 75
 Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
 80 85 90
 Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
 95 100 105
 Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
 110 115 120
 Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
 125 130 135
 Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
 140 145 150
 Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
 155 160 165
 Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
 170 175 180

Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr
				185					190					195
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly
				200					205					210
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr
				215					220					225
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu
				230					235					240
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg
				245					250					255

Ser Arg

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

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<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
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 20 25 30
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 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
 50 55 60
 Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
 65 70 75
 Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
 80 85 90
 Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
 95 100 105
 Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
 110 115 120
 Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
 125 130 135
 Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
 140 145 150
 Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
 155 160 165
 Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
 170 175 180
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<210> 97

<211> 2848

<212> DNA

<213> Homo Sapien

<400> 97

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<210> 98

<211> 807

<212> PRT

<213> Homo Sapien

<400> 98

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Glu	Asn	Tyr	Gly	Gly	Asn	Phe	Pro	Leu	Tyr	Leu	Thr	Lys	Leu	Pro	35	40	45	
Leu	Pro	Arg	Glu	Gly	Ala	Glu	Gly	Gln	Ile	Val	Leu	Ser	Gly	Asp	50	55	60	
Ser	Gly	Lys	Ala	Thr	Glu	Gly	Pro	Phe	Ala	Met	Asp	Pro	Asp	Ser	65	70	75	
Gly	Phe	Leu	Leu	Val	Thr	Arg	Ala	Leu	Asp	Arg	Glu	Glu	Gln	Ala	80	85	90	
Glu	Tyr	Gln	Leu	Gln	Val	Thr	Leu	Glu	Met	Gln	Asp	Gly	His	Val	95	100	105	
Leu	Trp	Gly	Pro	Gln	Pro	Val	Leu	Val	His	Val	Lys	Asp	Glu	Asn	110	115	120	
Asp	Gln	Val	Pro	His	Phe	Ser	Gln	Ala	Ile	Tyr	Arg	Ala	Arg	Leu	125	130	135	
Ser	Arg	Gly	Thr	Arg	Pro	Gly	Ile	Pro	Phe	Leu	Phe	Leu	Glu	Ala	140	145	150	
Ser	Asp	Arg	Asp	Glu	Pro	Gly	Thr	Ala	Asn	Ser	Asp	Leu	Arg	Phe	155	160	165	
His	Ile	Leu	Ser	Gln	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Asp	Met	Phe	170	175	180	
Gln	Leu	Glu	Pro	Arg	Leu	Gly	Ala	Leu	Ala	Leu	Ser	Pro	Lys	Gly	185	190	195	
Ser	Thr	Ser	Leu	Asp	His	Ala	Leu	Glu	Arg	Thr	Tyr	Gln	Leu	Leu	200	205	210	
Val	Gln	Val	Lys	Asp	Met	Gly	Asp	Gln	Ala	Ser	Gly	His	Gln	Ala				

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Thr	Ala	Thr	Val	Glu	Val	Ser	Ile	Ile	Glu	Ser	Thr	Trp	Val	Ser
				230					235					240
Leu	Glu	Pro	Ile	His	Leu	Ala	Glu	Asn	Leu	Lys	Val	Leu	Tyr	Pro
				245					250					255
His	His	Met	Ala	Gln	Val	His	Trp	Ser	Gly	Gly	Asp	Val	His	Tyr
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Tyr	Ala	Ala	Pro	Leu	Glu	Leu	His	Val	Leu	Val	Met	Asp	Glu	Asn
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Glu	Asp	Ala	Asp	Ala	Pro	Gly	Ser	Pro	Asn	Ser	His	Val	Val	Tyr
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Gln	Leu	Leu	Ser	Pro	Glu	Pro	Glu	Asp	Gly	Val	Glu	Gly	Arg	Ala
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Asp	Leu	Ala	Gly	Ala	Glu	Gly	Gly	Phe	Ser	Ser	Thr	Cys	Glu	Val
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Glu	Val	Ala	Val	Thr	Asp	Ile	Asn	Asp	His	Ala	Pro	Glu	Phe	Ile
				440					445					450
Thr	Ser	Gln	Ile	Gly	Pro	Ile	Ser	Leu	Pro	Glu	Asp	Val	Glu	Pro
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Gly	Thr	Leu	Val	Ala	Met	Leu	Thr	Ala	Ile	Asp	Ala	Asp	Leu	Glu
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Pro	Ala	Phe	Arg	Leu	Met	Asp	Phe	Ala	Ile	Glu	Arg	Gly	Asp	Thr
				485					490					495
Glu	Gly	Thr	Phe	Gly	Leu	Asp	Trp	Glu	Pro	Asp	Ser	Gly	His	Val

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His Glu Val Val Val Val Val Gln Ser	Val Ala Lys Leu Val	Gly
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Pro Gly Pro Gly Pro Gly Ala Thr Ala	Thr Val Thr Val Leu	Val
545	550	555
Glu Arg Val Met Pro Pro Pro Lys Leu	Asp Gln Glu Ser Tyr	Glu
560	565	570
Ala Ser Val Pro Ile Ser Ala Pro Ala	Gly Ser Phe Leu Leu	Thr
575	580	585
Ile Gln Pro Ser Asp Pro Ile Ser Arg	Thr Leu Arg Phe Ser	Leu
590	595	600
Val Asn Asp Ser Glu Gly Trp Leu Cys	Ile Glu Lys Phe Ser	Gly
605	610	615
Glu Val His Thr Ala Gln Ser Leu Gln	Gly Ala Gln Pro Gly	Asp
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Thr Tyr Thr Val Leu Val Glu Ala Gln	Asp Thr Ala Leu Thr	Leu
635	640	645
Ala Pro Val Pro Ser Gln Tyr Leu Cys	Thr Pro Arg Gln Asp	His
650	655	660
Gly Leu Ile Val Ser Gly Pro Ser Lys	Asp Pro Asp Leu Ala	Ser
665	670	675
Gly His Gly Pro Tyr Ser Phe Thr Leu	Gly Pro Asn Pro Thr	Val
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Gln Arg Asp Trp Arg Leu Gln Thr Leu	Asn Gly Ser His Ala	Tyr
695	700	705
Leu Thr Leu Ala Leu His Trp Val Glu	Pro Arg Glu His Ile	Ile
710	715	720
Pro Val Val Val Ser His Asn Ala Gln	Met Trp Gln Leu Leu	Val
725	730	735
Arg Val Ile Val Cys Arg Cys Asn Val	Glu Gly Gln Cys Met	Arg
740	745	750
Lys Val Gly Arg Met Lys Gly Met Pro	Thr Lys Leu Ser Ala	Val
755	760	765
Gly Ile Leu Val Gly Thr Leu Val Ala	Ile Gly Ile Phe Leu	Ile
770	775	780
Leu Ile Phe Thr His Trp Thr Met Ser	Arg Lys Lys Asp Pro	Asp

785

790

795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val
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<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

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<210> 100
 <211> 596
 <212> PRT
 <213> Homo Sapien

<400> 100

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Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala	320	325	330
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val	335	340	345
Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala	350	355	360
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala	365	370	375
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala	380	385	390
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Val Ser Thr Ala	395	400	405
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	410	415	420
Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Glu Ala Ser Thr Ala	425	430	435
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val	440	445	450
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala	455	460	465
Thr Asn Ser Gly Ser Ser Val Thr Ser Ala Gly Ser Gly Thr Ala	470	475	480
Ala Leu Thr Gly Met His Thr Thr Ser His Ser Ala Ser Thr Ala	485	490	495
Val Ser Glu Ala Lys Pro Gly Gly Ser Leu Val Pro Trp Glu Ile	500	505	510
Phe Leu Ile Thr Leu Val Ser Val Val Ala Ala Val Gly Leu Phe	515	520	525
Ala Gly Leu Phe Phe Cys Val Arg Asn Ser Leu Ser Leu Arg Asn	530	535	540
Thr Phe Asn Thr Ala Val Tyr His Pro His Gly Leu Asn His Gly	545	550	555
Leu Gly Pro Gly Pro Gly Gly Asn His Gly Ala Pro His Arg Pro	560	565	570

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<210> 101

<211> 1728

<212> DNA

<213> Homo Sapien

<400> 101

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<210> 102

<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

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Gln	Asp	Ser	Lys	Ser	Phe	Gly	Ile	Met	Val	Ser	Trp	Lys	Gly	Ile	35	40	45	
Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile	50	55	60	
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser	65	70	75	
Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr	80	85	90	
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile	95	100	105	
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile	110	115	120	
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys	125	130	135	

Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys	140	145	150
Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala	155	160	165
Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser	170	175	180
His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro	185	190	195
Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn	200	205	210
Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln	215	220	225
Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe	230	235	240
Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His	245	250	255
Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys	260	265	270
His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val	275	280	285
His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu	290	295	300
Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu	305	310	315
Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln	320	325	330
Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val	335	340	345
Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met	350	355	360
Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile	365	370	375
Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly	380	385	390
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Pro His Leu Asn Ser Lys Lys Asn Glu	410		

<210> 103
<211> 2403
<212> DNA
<213> Homo Sapien

<400> 103
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<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

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Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu					
				35					40					45					
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe					
				50					55					60					
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser					
				65					70					75					
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp					
				80					85					90					
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr					
				95					100					105					
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile					
				110					115					120					
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly					
				125					130					135					
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile					
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Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala					
				155					160					165					
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg					
				170					175					180					
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile					
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Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu					
				200					205					210					
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu					
				215					220					225					
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu					
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Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile					
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Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp					
				260					265					270					
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys					
				275					280					285					
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys					
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	335	340	345		
Asp Val Gly Gln	Asn Val Gly Trp Tyr	Val Gly Val Cys Arg	Asp		
	350	355	360		
Asp Val Asp Arg	Gly Lys Asn Asn Val	Thr Leu Ser Pro Asn	Asn		
	365	370	375		
Gly Tyr Trp Val	Leu Arg Leu Thr Thr	Glu His Leu Tyr Phe	Thr		
	380	385	390		
Phe Asn Pro His	Phe Ile Ser Leu Pro	Pro Ser Thr Pro Pro	Thr		
	395	400	405		
Arg Val Gly Val	Phe Leu Asp Tyr Glu	Gly Gly Thr Ile Ser	Phe		
	410	415	420		
Phe Asn Thr Asn	Asp Gln Ser Leu Ile	Tyr Thr Leu Leu Thr	Cys		
	425	430	435		
Gln Phe Glu Gly	Leu Leu Arg Pro Tyr	Ile Gln His Ala Met	Tyr		
	440	445	450		
Asp Glu Glu Lys	Gly Thr Pro Ile Phe	Ile Cys Pro Val Ser	Trp		
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<210> 105
 <211> 2103
 <212> DNA
 <213> Homo Sapien

<400> 105
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 aatagtgagc tggggagatg aatgtgcgaa acccaacaag cctgggtgtt 1250
 atactagagt tacggccttg cgggactgga ttacttcaaa aactggtatc 1300
 taagagacaa aagcctcatg gaacagataa catttttttt tgttttttgg 1350
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 cagaattttg acttggtgac ataaatttgt aatgcatata tacaatttga 1650
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 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900

tccagaaaga agccaagata tatccttatt ttcatttcca aacaactact 1950
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 caaacttcat gcaatgtact tggtctaagc aaattaaagc aaatatttat 2050
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<210> 106
 <211> 423
 <212> PRT
 <213> Homo Sapien

<400> 106
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 Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
 35 40 45
 Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
 50 55 60
 Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
 65 70 75
 Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
 80 85 90
 Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
 95 100 105
 Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
 110 115 120
 Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
 125 130 135
 Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val
 140 145 150
 Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile
 155 160 165
 Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr
 170 175 180
 Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly
 185 190 195
 Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln

	200	205	210
Trp Asp Gly Ser	His Arg Cys Gly Ala	Thr Leu Ile Asn Ala	Thr
	215	220	225
Trp Leu Val Ser	Ala Ala His Cys Phe	Thr Thr Tyr Lys Asn	Pro
	230	235	240
Ala Arg Trp Thr	Ala Ser Phe Gly Val	Thr Ile Lys Pro Ser	Lys
	245	250	255
Met Lys Arg Gly	Leu Arg Arg Ile Ile	Val His Glu Lys Tyr	Lys
	260	265	270
His Pro Ser His	Asp Tyr Asp Ile Ser	Leu Ala Glu Leu Ser	Ser
	275	280	285
Pro Val Pro Tyr	Thr Asn Ala Val His	Arg Val Cys Leu Pro	Asp
	290	295	300
Ala Ser Tyr Glu	Phe Gln Pro Gly Asp	Val Met Phe Val Thr	Gly
	305	310	315
Phe Gly Ala Leu	Lys Asn Asp Gly Tyr	Ser Gln Asn His Leu	Arg
	320	325	330
Gln Ala Gln Val	Thr Leu Ile Asp Ala	Thr Thr Cys Asn Glu	Pro
	335	340	345
Gln Ala Tyr Asn	Asp Ala Ile Thr Pro	Arg Met Leu Cys Ala	Gly
	350	355	360
Ser Leu Glu Gly	Lys Thr Asp Ala Cys	Gln Gly Asp Ser Gly	Gly
	365	370	375
Pro Leu Val Ser	Ser Asp Ala Arg Asp	Ile Trp Tyr Leu Ala	Gly
	380	385	390
Ile Val Ser Trp	Gly Asp Glu Cys Ala	Lys Pro Asn Lys Pro	Gly
	395	400	405
Val Tyr Thr Arg	Val Thr Ala Leu Arg	Asp Trp Ile Thr Ser	Lys
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Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

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 tggccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
 gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgectgctct 250
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 aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
 atggtgggac tggagccata gtaaagggtg atttacttct accaactagt 1500
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acttttatta ctcagcgatc tattcttctg atgctaaata aattatatat 1600
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<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met	Ala	Arg	Glu	Asp	Ser	Val	Lys	Cys	Leu	Arg	Cys	Leu	Leu	Tyr
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Ala	Leu	Asn	Leu	Leu	Phe	Trp	Leu	Met	Ser	Ile	Ser	Val	Leu	Ala
			20						25					30

Val	Ser	Ala	Trp	Met	Arg	Asp	Tyr	Leu	Asn	Asn	Val	Leu	Thr	Leu
			35						40					45

Thr	Ala	Glu	Thr	Arg	Val	Glu	Glu	Ala	Val	Ile	Leu	Thr	Tyr	Phe
			50						55					60

Pro	Val	Val	His	Pro	Val	Met	Ile	Ala	Val	Cys	Cys	Phe	Leu	Ile
			65						70					75

Ile	Val	Gly	Met	Leu	Gly	Tyr	Cys	Gly	Thr	Val	Lys	Arg	Asn	Leu
			80						85					90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
				290					295					300	
Glu	Met	Glu	Glu	Leu											
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<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

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gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

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 ggaatttgga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr
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Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser
				20					25					30
Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser
				35					40					45
Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr
				50					55					60
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile
				65					70					75
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly
				80					85					90
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys
				95					100					105

Ala Ser Phe Asn Gly	Asn Cys Cys Leu Trp	Asn Thr Thr Val Glu
110	115	120
Val Lys Ala Cys Pro Gly Gly Tyr Tyr	Val Tyr Arg Leu Thr Lys	
125	130	135
Pro Ser Val Cys Phe His Val Tyr Cys	Gly His Phe Tyr Asp Ile	
140	145	150
Cys Asp Glu Asp Cys His Gly Ser Cys	Ser Asp Thr Ser Glu Cys	
155	160	165
Thr Cys Ala Pro Gly Thr Val Leu Gly	Pro Asp Arg Gln Thr Cys	
170	175	180
Phe Asp Glu Asn Glu Cys Glu Gln Asn	Asn Gly Gly Cys Ser Glu	
185	190	195
Ile Cys Val Asn Leu Lys Asn Ser Tyr	Arg Cys Glu Cys Gly Val	
200	205	210
Gly Arg Val Leu Arg Ser Asp Gly Lys	Thr Cys Glu Asp Val Glu	
215	220	225
Gly Cys His Asn Asn Asn Gly Gly Cys	Ser His Ser Cys Leu Gly	
230	235	240
Ser Glu Lys Gly Tyr Gln Cys Glu Cys	Pro Arg Gly Leu Val Leu	
245	250	255
Ser Glu Asp Asn His Thr Cys Gln Val	Pro Val Leu Cys Lys Ser	
260	265	270
Asn Ala Ile Glu Val Asn Ile Pro Arg	Glu Leu Val Gly Gly Leu	
275	280	285
Glu Leu Phe Leu Thr Asn Thr Ser Cys	Arg Gly Val Ser Asn Gly	
290	295	300
Thr His Val Asn Ile Leu Phe Ser Leu	Lys Thr Cys Gly Thr Val	
305	310	315
Val Asp Val Val Asn Asp Lys Ile Val	Ala Ser Asn Leu Val Thr	
320	325	330
Gly Leu Pro Lys Gln Thr Pro Gly Ser	Ser Gly Asp Phe Ile Ile	
335	340	345
Arg Thr Ser Lys Leu Leu Ile Pro Val	Thr Cys Glu Phe Pro Arg	
350	355	360
Leu Tyr Thr Ile Ser Glu Gly Tyr Val	Pro Asn Leu Arg Asn Ser	
365	370	375
Pro Leu Glu Ile Met Ser Arg Asn His	Gly Ile Phe Pro Phe Thr	
380	385	390

Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu	
				395					400					405	
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile	
				410					415					420	
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser	
				425					430					435	
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr	
				440					445					450	
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln	
				455					460					465	
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val	
				470					475					480	
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys	
				485					490					495	
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala	
				500					505					510	
Gln	Gly	Cys	His	Arg	Arg	Met	Arg	Arg	Gly	Ala	Gly	Gly	Glu	Asp	
				515					520					525	
Ser	Ala	Gly	Leu	Gln	Gly	Gln	Thr	Leu	Thr	Gly	Gly	Pro	Ile	Arg	
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Ile	Asp	Trp	Glu	Asp											
				545											

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
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 cttggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200
 agagccagca tgttacagga tcttgacagt gatcaacctc tgaacagcct 250
 cgatgtcaaa cccctgcgca aaccccgatat ccccatggag accttcagaa 300
 aggtgggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
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 cgggcagcct ctccattca tcccaggagaa gcagctgtgt gacggagagc 450

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tcttcaccca tccccaagcc tactagagca agaaaccagt tgtaatataa 1950
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<210> 112
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112
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Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45
Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr
50 55 60
Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln
65 70 75
Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu
80 85 90
His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg
95 100 105
Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr
110 115 120
Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu
125 130 135
Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu
140 145 150
Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn
155 160 165
Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser
170 175 180
Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu
185 190 195
Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser
200 205 210

Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	215	220	225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	230	235	240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	245	250	255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	260	265	270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	275	280	285
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	290	295	300
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	305	310	315
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	320	325	330
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	335	340	345
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu	350	355	360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val	365	370	375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser	380	385	390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys	395	400	405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr	410	415	420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu				425	430	

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
 Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser
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 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 115
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 115
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 ttgtggactg gtgttttgta tcttggccct aactctaatt gtctgttttt 200
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 gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaaat ggcaactgatg 350

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<210> 116
 <211> 317
 <212> PRT
 <213> Homo Sapien

<400> 116
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 35 40 45
 Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys
 50 55 60
 Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys
 65 70 75
 Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe

80					85					90				
Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe
				95					100					105
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys
				110					115					120
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro
				125					130					135
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe
				140					145					150
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn
				155					160					165
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn
				170					175					180
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu
				185					190					195
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala
				200					205					210
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro
				215					220					225
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu
				230					235					240
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe
				245					250					255
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg
				260					265					270
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly
				275					280					285
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys
				290					295					300
Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly
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Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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 gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
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 aggttaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120

Ser Gly Ile Met	Phe Ile Val Ser Gly	Leu Cys Ala Ile Ala Gly	125	130	135
Val Ser Val Phe	Ala Asn Met Leu Val	Thr Asn Phe Trp Met Ser	140	145	150
Thr Ala Asn Met	Tyr Thr Gly Met Gly	Gly Met Val Gln Thr Val	155	160	165
Gln Thr Arg Tyr	Thr Phe Gly Ala Ala	Leu Phe Val Gly Trp Val	170	175	180
Ala Gly Gly Leu	Thr Leu Ile Gly Gly	Val Met Met Cys Ile Ala	185	190	195
Cys Arg Gly Leu	Ala Pro Glu Glu Thr	Asn Tyr Lys Ala Val Ser	200	205	210
Tyr His Ala Ser	Gly His Ser Val Ala	Tyr Lys Pro Gly Gly Phe	215	220	225
Lys Ala Ser Thr	Gly Phe Gly Ser Asn	Thr Lys Asn Lys Lys Ile	230	235	240
Tyr Asp Gly Gly	Ala Arg Thr Glu Asp	Glu Val Gln Ser Tyr Pro	245	250	255
Ser Lys His Asp	Tyr Val		260		

<210> 119

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 119

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<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met	Ala	Thr	His	Ala	Leu	Glu	Ile	Ala	Gly	Leu	Phe	Leu	Gly	Gly
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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp
				20					25					30
Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn
				35					40					45
Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile
				50					55					60
Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro
				65					70					75
Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met
				80					85					90
Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr
				95					100					105
Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu
				110					115					120
Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile
				125					130					135
Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn
				140					145					150
Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
				155					160					165
Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
				170					175					180
Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
				185					190					195
Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
				200					205					210
Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
				215					220					225

<210> 121

<211> 1257
<212> DNA
<213> Homo Sapien

<400> 121
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<210> 122

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 122

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				20					25					30	
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg	
				35					40					45	
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala	
				50					55					60	
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro	
				65					70					75	
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	
				80					85					90	
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	
				95					100					105	
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	
				110					115					120	
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser	
				125					130					135	
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg	
				140					145					150	
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu	
				155					160					165	
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln	
				170					175					180	
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser	
				185					190					195	
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp	
				200					205					210	
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp	
				215					220					225	
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu	
				230					235					240	

Leu Pro Lys

<210> 123

<211> 2379
<212> DNA
<213> Homo Sapien

<400> 123

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tcgaagcttt cagtggaccc agtgttttcc agtgtgtccc gaatctgcag 1350
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 tcataatact ggtcattttc ctctcataca taatcaaccc attgaaattt 2250
 aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
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<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

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Leu	Val	Ile	Ala	Pro	Thr	Val	Leu	Leu	Thr	Met	Leu	Ser	Ser	Ala
				20					25					30
Glu	Arg	Gly	Cys	Pro	Lys	Gly	Cys	Arg	Cys	Glu	Gly	Lys	Met	Val
				35					40					45

Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser		50	55	60
Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys		65	70	75
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu		80	85	90
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe		95	100	105
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg		110	115	120
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu		125	130	135
Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser		140	145	150
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg		155	160	165
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys		170	175	180
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser		185	190	195
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu		200	205	210
His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe		215	220	225
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys		230	235	240
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu		245	250	255
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly		260	265	270
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu		275	280	285
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser		290	295	300
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu		305	310	315
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe		320	325	330

Lys	Gly	Leu	Arg	Glu	Asn	Thr	Ile	Ile	Cys	Ala	Ser	Pro	Lys	Glu	
				335					340					345	
Leu	Gln	Gly	Val	Asn	Val	Ile	Asp	Ala	Val	Lys	Asn	Tyr	Ser	Ile	
				350					355					360	
Cys	Gly	Lys	Ser	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ala	Arg	Ala	Leu	
				365					370					375	
Pro	Lys	Pro	Thr	Phe	Lys	Pro	Lys	Leu	Pro	Arg	Pro	Lys	His	Glu	
				380					385					390	
Ser	Lys	Pro	Pro	Leu	Pro	Pro	Thr	Val	Gly	Ala	Thr	Glu	Pro	Gly	
				395					400					405	
Pro	Glu	Thr	Asp	Ala	Asp	Ala	Glu	His	Ile	Ser	Phe	His	Lys	Ile	
				410					415					420	
Ile	Ala	Gly	Ser	Val	Ala	Leu	Phe	Leu	Ser	Val	Leu	Val	Ile	Leu	
				425					430					435	
Leu	Val	Ile	Tyr	Val	Ser	Trp	Lys	Arg	Tyr	Pro	Ala	Ser	Met	Lys	
				440					445					450	
Gln	Leu	Gln	Gln	Arg	Ser	Leu	Met	Arg	Arg	His	Arg	Lys	Lys	Lys	
				455					460					465	
Arg	Gln	Ser	Leu	Lys	Gln	Met	Thr	Pro	Ser	Thr	Gln	Glu	Phe	Tyr	
				470					475					480	
Val	Asp	Tyr	Lys	Pro	Thr	Asn	Thr	Glu	Thr	Ser	Glu	Met	Leu	Leu	
				485					490					495	
Asn	Gly	Thr	Gly	Pro	Cys	Thr	Tyr	Asn	Lys	Ser	Gly	Ser	Arg	Glu	
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Cys Glu Val

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

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tcacaaaaac tcgactccaa atgcaaggag aagcagctct tgctcggttg 200

ggagacgggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250

cctagggatc attgaagagg aaggctttct aaagcttttg caaggagtga 300

caccgcgcat ttacagacac gtagtgtatt ctggagggtcg aatggtcaca 350
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<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

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Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90
Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95					100					105
Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110					115					120

Glu	Asp	Glu	His	Tyr	Pro	Leu	Trp	Lys	Ser	Val	Ile	Gly	Gly	Met	
				125					130					135	
Met	Ala	Gly	Val	Ile	Gly	Gln	Phe	Leu	Ala	Asn	Pro	Thr	Asp	Leu	
				140					145					150	
Val	Lys	Val	Gln	Met	Gln	Met	Glu	Gly	Lys	Arg	Lys	Leu	Glu	Gly	
				155					160					165	
Lys	Pro	Leu	Arg	Phe	Arg	Gly	Val	His	His	Ala	Phe	Ala	Lys	Ile	
				170					175					180	
Leu	Ala	Glu	Gly	Gly	Ile	Arg	Gly	Leu	Trp	Ala	Gly	Trp	Val	Pro	
				185					190					195	
Asn	Ile	Gln	Arg	Ala	Ala	Leu	Val	Asn	Met	Gly	Asp	Leu	Thr	Thr	
				200					205					210	
Tyr	Asp	Thr	Val	Lys	His	Tyr	Leu	Val	Leu	Asn	Thr	Pro	Leu	Glu	
				215					220					225	
Asp	Asn	Ile	Met	Thr	His	Gly	Leu	Ser	Ser	Leu	Cys	Ser	Gly	Leu	
				230					235					240	
Val	Ala	Ser	Ile	Leu	Gly	Thr	Pro	Ala	Asp	Val	Ile	Lys	Ser	Arg	
				245					250					255	
Ile	Met	Asn	Gln	Pro	Arg	Asp	Lys	Gln	Gly	Arg	Gly	Leu	Leu	Tyr	
				260					265					270	
Lys	Ser	Ser	Thr	Asp	Cys	Leu	Ile	Gln	Ala	Val	Gln	Gly	Glu	Gly	
				275					280					285	
Phe	Met	Ser	Leu	Tyr	Lys	Gly	Phe	Leu	Pro	Ser	Trp	Leu	Arg	Met	
				290					295					300	
Thr	Pro	Trp	Ser	Met	Val	Phe	Trp	Leu	Thr	Tyr	Glu	Lys	Ile	Arg	
				305					310					315	
Glu	Met	Ser	Gly	Val	Ser	Pro	Phe								
				320											

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

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cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250

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 cagtggattt catggtgatc attaaaaaag aaaaatcgca accaaaaaa 1500
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<210> 128
 <211> 260
 <212> PRT
 <213> Homo Sapien

<400> 128

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Val	Thr	Gly	Ala	Ser	Gly	Gly	Ile	Gly	Ala	Ala	Val	Ala	Arg	Ala	
				20					25					30	
Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	
				35					40					45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	
				50					55					60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	
				65					70					75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	
				80					85					90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	
				95					100					105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	
				110					115					120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	
				125					130					135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn	
				140					145					150	
Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro	Leu	Ser	Val	Thr	His	Phe	
				155					160					165	
Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala	Leu	Thr	Glu	Gly	Leu	
				170					175					180	
Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile	Arg	Ala	Thr	Cys	
				185					190					195	
Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe	Lys	Leu	His	
				200					205					210	
Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln	Met	Lys	
				215					220					225	
Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val	Leu	
				230					235					240	
Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro	
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Thr	Glu	Gln	Val	Thr											
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<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

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<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

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1	5	10	15
Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro	20	25	30
Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg	35	40	45
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val	50	55	60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro	65	70	75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser	80	85	90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val	95	100	105
Ala Val Glu Cys Leu Lys	110		

<210> 131
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 131
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 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
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 cgagacagca actatctccg actgcttttc ctgtcccgtat atcaccttag 550
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<210> 132

<211> 649
 <212> PRT
 <213> Homo Sapien

<400> 132

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Cys	Pro	Ser	Val	Cys	Arg	Cys	Asp	Ala	Gly	Phe	Ile	Tyr	Cys	Asn	35	40	45	
Asp	Arg	Phe	Leu	Thr	Ser	Ile	Pro	Thr	Gly	Ile	Pro	Glu	Asp	Ala	50	55	60	
Thr	Thr	Leu	Tyr	Leu	Gln	Asn	Asn	Gln	Ile	Asn	Asn	Ala	Gly	Ile	65	70	75	
Pro	Ser	Asp	Leu	Lys	Asn	Leu	Leu	Lys	Val	Glu	Arg	Ile	Tyr	Leu	80	85	90	
Tyr	His	Asn	Ser	Leu	Asp	Glu	Phe	Pro	Thr	Asn	Leu	Pro	Lys	Tyr	95	100	105	
Val	Lys	Glu	Leu	His	Leu	Gln	Glu	Asn	Asn	Ile	Arg	Thr	Ile	Thr	110	115	120	
Tyr	Asp	Ser	Leu	Ser	Lys	Ile	Pro	Tyr	Leu	Glu	Glu	Leu	His	Leu	125	130	135	
Asp	Asp	Asn	Ser	Val	Ser	Ala	Val	Ser	Ile	Glu	Glu	Gly	Ala	Phe	140	145	150	
Arg	Asp	Ser	Asn	Tyr	Leu	Arg	Leu	Leu	Phe	Leu	Ser	Arg	Asn	His	155	160	165	
Leu	Ser	Thr	Ile	Pro	Trp	Gly	Leu	Pro	Arg	Thr	Ile	Glu	Glu	Leu	170	175	180	
Arg	Leu	Asp	Asp	Asn	Arg	Ile	Ser	Thr	Ile	Ser	Ser	Pro	Ser	Leu	185	190	195	
Gln	Gly	Leu	Thr	Ser	Leu	Lys	Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu	200	205	210	
Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val	215	220	225	
Asn	Leu	Thr	Glu	Leu	Ser	Leu	Val	Arg	Asn	Ser	Leu	Thr	Ala	Ala	230	235	240	
Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln	245	250	255	
Asp	Asn	His	Ile	Asn	Arg	Val	Pro	Pro	Asn	Ala	Phe	Ser	Tyr	Leu				

260										265					270				
Arg	Gln	Leu	Tyr	Arg	Leu	Asp	Met	Ser	Asn	Asn	Asn	Asn	Leu	Ser	Asn				
				275					280						285				
Leu	Pro	Gln	Gly	Ile	Phe	Asp	Asp	Leu	Asp	Asn	Ile	Thr	Gln	Leu					
				290					295					300					
Ile	Leu	Arg	Asn	Asn	Pro	Trp	Tyr	Cys	Gly	Cys	Lys	Met	Lys	Trp					
				305					310					315					
Val	Arg	Asp	Trp	Leu	Gln	Ser	Leu	Pro	Val	Lys	Val	Asn	Val	Arg					
				320					325					330					
Gly	Leu	Met	Cys	Gln	Ala	Pro	Glu	Lys	Val	Arg	Gly	Met	Ala	Ile					
				335					340					345					
Lys	Asp	Leu	Asn	Ala	Glu	Leu	Phe	Asp	Cys	Lys	Asp	Ser	Gly	Ile					
				350					355					360					
Val	Ser	Thr	Ile	Gln	Ile	Thr	Thr	Ala	Ile	Pro	Asn	Thr	Val	Tyr					
				365					370					375					
Pro	Ala	Gln	Gly	Gln	Trp	Pro	Ala	Pro	Val	Thr	Lys	Gln	Pro	Asp					
				380					385					390					
Ile	Lys	Asn	Pro	Lys	Leu	Thr	Lys	Asp	Gln	Gln	Thr	Thr	Gly	Ser					
				395					400					405					
Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr	Val	Lys	Ser	Val	Thr	Ser					
				410					415					420					
Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala	Leu	Pro	Met	Thr	Ala					
				425					430					435					
Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser	Pro	Ala	Phe	Gly					
				440					445					450					
Ser	Ile	Thr	Glu	Thr	Ile	Val	Thr	Gly	Glu	Arg	Ser	Glu	Tyr	Leu					
				455					460					465					
Val	Thr	Ala	Leu	Glu	Pro	Asp	Ser	Pro	Tyr	Lys	Val	Cys	Met	Val					
				470					475					480					
Pro	Met	Glu	Thr	Ser	Asn	Leu	Tyr	Leu	Phe	Asp	Glu	Thr	Pro	Val					
				485					490					495					
Cys	Ile	Glu	Thr	Glu	Thr	Ala	Pro	Leu	Arg	Met	Tyr	Asn	Pro	Thr					
				500					505					510					
Thr	Thr	Leu	Asn	Arg	Glu	Gln	Glu	Lys	Glu	Pro	Tyr	Lys	Asn	Pro					
				515					520					525					
Asn	Leu	Pro	Leu	Ala	Ala	Ile	Ile	Gly	Gly	Ala	Val	Ala	Leu	Val					
				530					535					540					
Thr	Ile	Ala	Leu	Leu	Ala	Leu	Val	Cys	Trp	Tyr	Val	His	Arg	Asn					

545	550	555
Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr Ser Lys Gly Arg Arg		
560	565	570
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser		
575	580	585
Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser		
590	595	600
Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe		
605	610	615
Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser		
620	625	630
Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp		
635	640	645
His Ser His Ser		

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

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<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

Met	Ser	Ala	Arg	Gly	Arg	Trp	Glu	Gly	Gly	Gly	Arg	Arg	Ala	Cys
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Arg	Gly	Ser	Leu	Gly	Leu	Ala	Arg	Ala	Gln	Gly	Ala	Glu	Arg	Val
			20					25					30	

Thr	Ser	Ser	Glu	Gln	Arg	Pro	Ala	Met	Ala	Ser	Leu	Gly	Leu	Leu	35	40	45
Leu	Leu	Leu	Leu	Leu	Thr	Ala	Leu	Pro	Pro	Leu	Trp	Ser	Ser	Ser	50	55	60
Leu	Pro	Gly	Leu	Asp	Thr	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Ala	Asp	65	70	75
Leu	Ile	Leu	Ser	Ala	Leu	Glu	Arg	Ala	Thr	Val	Phe	Leu	Glu	Gln	80	85	90
Arg	Leu	Pro	Glu	Ile	Asn	Leu	Asp	Gly	Met	Val	Gly	Val	Arg	Val	95	100	105
Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	110	115	120
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	125	130	135
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	140	145	150
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	155	160	165
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	170	175	180
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	185	190	195
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	200	205	210
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	215	220	225
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	230	235	240
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	245	250	255
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	260	265	270
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	275	280	285
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	290	295	300
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	305	310	315

Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu	
				320					325					330	
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser	
				335					340					345	
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser	
				350					355					360	
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln	
				365					370					375	
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro	
				380					385					390	
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe	
				395					400					405	
Tyr	Ile	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Ala	His	Ala	
				410					415					420	
Gly	Leu	Glu	Leu	Leu	Ile	Ser	Arg	Asp	Pro	Pro	Thr	Ser	Gly	Ser	
				425					430					435	
Gln	Ser	Val	Gly	Leu											
				440											

<210> 135
 <211> 884
 <212> DNA
 <213> Homo Sapien

<400> 135
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 gcccggggct gctgctgagg gatcgggagg gaggggggtc ggcataggag 150

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 tttccttaag acagatggga gttttgtggt tcatgatata ctttctggat 300
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atcccgacgt tgatctctta caactgtgta tggt 884

<210> 136
<211> 242
<212> PRT
<213> Homo Sapien

<400> 136
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20 25 30
Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
35 40 45
Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
50 55 60
Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
65 70 75
Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
80 85 90
Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
95 100 105
Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
110 115 120
Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
125 130 135
Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
140 145 150
Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
155 160 165
Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
170 175 180
Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu
185 190 195
Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val

	200		205		210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys					
	215		220		225
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys					
	230		235		240

Arg Arg

<210> 137
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 137
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 ttctcttcac gggaggett ggcagttttc ttactcctgt ggtctccaga 350
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 ccattccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
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<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

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Ser	Phe	Ser	Ile	Tyr	Ser	Leu	Gln	Val	Pro	Ala	Val	Pro	Gly	Leu
			20					25					30	
Thr	Cys	Trp	Ala	Leu	Thr	Ala	Glu	Pro	Gly	Trp	Gly	Gln	Asn	Lys
			35					40					45	
Gly	Ala	Thr	Thr	Cys	Ala	Thr	Asn	Ser	His	Ser	Asp	Ser	Glu	Leu
			50					55					60	
Arg	Pro	Glu	Ile	Phe	Ser	Ser	Arg	Glu	Ala	Trp	Gln	Phe	Phe	Leu
			65					70					75	
Leu	Leu	Trp	Ser	Pro	Asp	Phe	Arg	Pro	Lys	Met	Lys	Ala	Ser	Ser
			80					85					90	
Leu	Ala	Phe	Ser	Leu	Leu	Ser	Ala	Ala	Phe	Tyr	Leu	Leu	Trp	Thr
			95					100					105	
Pro	Ser	Thr	Gly	Leu	Lys	Thr	Leu	Asn	Leu	Gly	Ser	Cys	Val	Ile
			110					115					120	
Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	Phe	Ser	Glu	Ile	Arg
			125					130					135	
Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu

140	145	150
Arg Arg Thr Glu Ser Leu Gln Asp Thr	Lys Pro Ala Asn Arg Cys	
155	160	165
Cys Leu Leu Arg His Leu Leu Arg Leu	Tyr Leu Asp Arg Val Phe	
170	175	180
Lys Asn Tyr Gln Thr Pro Asp His Tyr	Thr Leu Arg Lys Ile Ser	
185	190	195
Ser Leu Ala Asn Ser Phe Leu Thr Ile	Lys Lys Asp Leu Arg Leu	
200	205	210
Ser His Ala His Met Thr Cys His Cys	Gly Glu Glu Ala Met Lys	
215	220	225
Lys Tyr Ser Gln Ile Leu Ser His Phe	Glu Lys Leu Glu Pro Gln	
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Ala Ala Val Val Lys Ala Leu Gly Glu	Leu Asp Ile Leu Leu Gln	
245	250	255
Trp Met Glu Glu Thr Glu		
260		

<210> 139
 <211> 2395
 <212> DNA
 <213> Homo Sapien

<400> 139
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 cggggattct tcccggtcc cgttcgttcc tctgccagag cggaacacgg 200
 agcggagccc ccagcgcccc aaccctcggc tggagccagt tctaactgga 250
 ccacgctgcc accacctctc ttcagtaaag ttgttattgt tctgatagat 300
 gccttgagag atgattttgt gtttggttca aagggtgtga aatttatgcc 350
 ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400
 aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
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<210> 140
 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 140
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 1 5 10 15
 Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala
 20 25 30
 Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro
 35 40 45
 Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu
 50 55 60
 Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala
 65 70 75
 Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met
 80 85 90
 Pro Tyr Thr Thr Tyr Leu Val Glu Lys Gly Ala Ser His Ser Phe
 95 100 105
 Val Ala Glu Ala Lys Pro Pro Thr Val Thr Met Pro Arg Ile Lys
 110 115 120
 Ala Leu Met Thr Gly Ser Leu Pro Gly Phe Val Asp Val Ile Arg
 125 130 135
 Asn Leu Asn Ser Pro Ala Leu Leu Glu Asp Ser Val Ile Arg Gln
 140 145 150
 Ala Lys Ala Ala Gly Lys Arg Ile Val Phe Tyr Gly Asp Glu Thr
 155 160 165
 Trp Val Lys Leu Phe Pro Lys His Phe Val Glu Tyr Asp Gly Thr
 170 175 180
 Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val

	185		190		195
Thr Arg His Leu	Asp Lys Val Leu Lys	Arg Gly Asp Trp Asp Ile			
	200	205			210
Leu Ile Leu His	Tyr Leu Gly Leu Asp	His Ile Gly His Ile Ser			
	215	220			225
Gly Pro Asn Ser	Pro Leu Ile Gly Gln	Lys Leu Ser Glu Met Asp			
	230	235			240
Ser Val Leu Met	Lys Ile His Thr Ser	Leu Gln Ser Lys Glu Arg			
	245	250			255
Glu Thr Pro Leu	Pro Asn Leu Leu Val	Leu Cys Gly Asp His Gly			
	260	265			270
Met Ser Glu Thr	Gly Ser His Gly Ala	Ser Ser Thr Glu Glu Val			
	275	280			285
Asn Thr Pro Leu	Ile Leu Ile Ser Ser	Ala Phe Glu Arg Lys Pro			
	290	295			300
Gly Asp Ile Arg	His Pro Lys His Val	Gln			
	305	310			

<210> 141
 <211> 754
 <212> DNA
 <213> Homo Sapien

<400> 141
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 cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200
 gaaattcagc attcatgacc aggatcacaa agtactgggc ctggactctg 250
 ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300
 tttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcaccca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500
 ggctcaggtg ggctcctgga acatgctgga gtcggcggct caccgccgat 550
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 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650

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 cact 754

<210> 142
 <211> 193
 <212> PRT
 <213> Homo Sapien

<400> 142
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 Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
 35 40 45
 Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
 50 55 60
 Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
 65 70 75
 Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
 80 85 90
 Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
 95 100 105
 Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
 110 115 120
 Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
 125 130 135
 Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp
 140 145 150
 Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr
 155 160 165
 Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro
 170 175 180
 Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp
 185 190

<210> 143
 <211> 961
 <212> DNA
 <213> Homo Sapien

<400> 143

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 agataagatt aagggtctggg tctgtgctca attaactcct gtgggcacgg 200
 gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250
 cctgccgtgg aagggtgggc tgtcctgggc gctgctgctg cttctcttag 300
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 tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
 tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500
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 cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
 tcacctgctt cttcaccatc agcaccagge cctggatgac tcagttcagc 650
 ctctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700
 caggcttgct catgtgctgc tcccacatc cgtggacatc agcactactc 750
 tctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800
 attttgcatg tgtttgagat ctcatgacag tgttttagaa aatccacaca 850
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
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<210> 144
 <211> 147
 <212> PRT
 <213> Homo Sapien

<400> 144
 Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
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 Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
 20 25 30
 Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
 35 40 45
 Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
 50 55 60

Gln	Ser	Lys	Asp	Tyr	Tyr	Ala	Tyr	Arg	Leu	Gly	His	Ile	Leu	Asn
				65					70					75
Ser	Trp	Lys	Glu	Gln	Val	Glu	Ser	Lys	Thr	Val	Phe	Ser	Met	Glu
				80					85					90
Leu	Leu	Leu	Gly	Arg	Thr	Arg	Cys	Gly	Lys	Phe	Glu	Asp	Asp	Ile
				95					100					105
Asp	Asn	Cys	His	Phe	Gln	Glu	Ser	Thr	Glu	Leu	Asn	Asn	Thr	Phe
				110					115					120
Thr	Cys	Phe	Phe	Thr	Ile	Ser	Thr	Arg	Pro	Trp	Met	Thr	Gln	Phe
				125					130					135
Ser	Leu	Leu	Asn	Lys	Thr	Cys	Leu	Glu	Gly	Phe	His			
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<210> 145

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 145

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gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150
gaatcaagtg gaaccggaag gccctgcccc gcaactgcccc gatcactgag 200
gccaggtgg ctgagaaccg cccgggagcc ttcattcaagc aaggccgcaa 250
gctcgacatt gacttcggag ccgagggcaa cagggtactac gaggccaact 300
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gaacacatca ggcactgcg cacctgcttc acagtacttc ccaacaactc 900
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<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

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Leu	Leu	Phe	Ser	His	Leu	Ser	Ala	Val	Gln	Thr	Arg	Gly	Ile	Lys	20	25	30	
His	Arg	Ile	Lys	Trp	Asn	Arg	Lys	Ala	Leu	Pro	Ser	Thr	Ala	Gln	35	40	45	
Ile	Thr	Glu	Ala	Gln	Val	Ala	Glu	Asn	Arg	Pro	Gly	Ala	Phe	Ile	50	55	60	
Lys	Gln	Gly	Arg	Lys	Leu	Asp	Ile	Asp	Phe	Gly	Ala	Glu	Gly	Asn	65	70	75	
Arg	Tyr	Tyr	Glu	Ala	Asn	Tyr	Trp	Gln	Phe	Pro	Asp	Gly	Ile	His	80	85	90	
Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val	95	100	105	
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe	110	115	120	
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu	125	130	135	
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu	140	145	150	
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu	155	160	165	
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys	170	175						

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

<400> 147
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 tttcattttg cttgtcagt gggtaggtca ctgagtotta gtttttattt 250
 tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
 atgagtatat tgcattgatgc tgaggtttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 148
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 Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
 20 25 30
 Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45
 Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
 50 55 60
 Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149
 <211> 1893
 <212> DNA
 <213> Homo Sapien

<400> 149
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 cataacaaaa gctacagctc caggagccca gcgccgggct gtgacccaag 250

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 gaaagacaga tgaacccaaa ggaaaaacag aagcctattt ggaagccatc 1500
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<210> 150
 <211> 468
 <212> PRT
 <213> Homo Sapien

<400> 150
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 35 40 45
 Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
 50 55 60
 Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
 65 70 75
 Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
 80 85 90
 Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
 95 100 105
 Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
 110 115 120
 Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
 125 130 135
 Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp
 140 145 150
 Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg
 155 160 165
 Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu
 170 175 180
 Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu
 185 190 195
 Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu
 200 205 210
 Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys

	215	220	225
Ile Pro Glu Lys	Val Thr Pro Met Ala	Ala Ile Gln Asp Gly	Leu
	230	235	240
Ala Lys Gly Glu	Asn Asp Glu Thr Val	Ser Asn Thr Leu Thr	Leu
	245	250	255
Thr Asn Gly Leu	Glu Arg Arg Thr Lys	Thr Tyr Ser Glu Asp	Asn
	260	265	270
Phe Glu Glu Leu	Gln Tyr Phe Pro Asn	Phe Tyr Ala Leu Leu	Lys
	275	280	285
Ser Ile Asp Ser	Glu Lys Glu Ala Lys	Glu Lys Glu Thr Leu	Ile
	290	295	300
Thr Ile Met Lys	Thr Leu Ile Asp Phe	Val Lys Met Met Val	Lys
	305	310	315
Tyr Gly Thr Ile	Ser Pro Glu Glu Gly	Val Ser Tyr Leu Glu	Asn
	320	325	330
Leu Asp Glu Met	Ile Ala Leu Gln Thr	Lys Asn Lys Leu Glu	Lys
	335	340	345
Asn Ala Thr Asp	Asn Ile Ser Lys Leu	Phe Pro Ala Pro Ser	Glu
	350	355	360
Lys Ser His Glu	Glu Thr Asp Ser Thr	Lys Glu Glu Ala Ala	Lys
	365	370	375
Met Glu Lys Glu	Tyr Gly Ser Leu Lys	Asp Ser Thr Lys Asp	Asp
	380	385	390
Asn Ser Asn Pro	Gly Gly Lys Thr Asp	Glu Pro Lys Gly Lys	Thr
	395	400	405
Glu Ala Tyr Leu	Glu Ala Ile Arg Lys	Asn Ile Glu Trp Leu	Lys
	410	415	420
Lys His Asp Lys	Lys Gly Asn Lys Glu	Asp Tyr Asp Leu Ser	Lys
	425	430	435
Met Arg Asp Phe	Ile Asn Lys Gln Ala	Asp Ala Tyr Val Glu	Lys
	440	445	450
Gly Ile Leu Asp	Lys Glu Glu Ala Glu	Ala Ile Lys Arg Ile	Tyr
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Ser Ser Leu			

<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151

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<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

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			20						25					30	
Leu	His	Ala	Gly	Lys	Val	Ile	Lys	Gly	Glu	Glu	Ile	Ser	Val	Val	
			35						40					45	
Pro	Asn	Arg	Trp	Leu	Asp	Ala	Ser	Leu	Ser	Pro	Val	Ile	Leu	Gly	
			50						55					60	
Val	Gln	Gly	Gly	Ser	Gln	Cys	Leu	Ser	Cys	Gly	Val	Gly	Gln	Glu	
			65						70					75	
Pro	Thr	Leu	Thr	Leu	Glu	Pro	Val	Asn	Ile	Met	Glu	Leu	Tyr	Leu	
			80						85					90	
Gly	Ala	Lys	Glu	Ser	Lys	Ser	Phe	Thr	Phe	Tyr	Arg	Arg	Asp	Met	
			95						100					105	
Gly	Leu	Thr	Ser	Ser	Phe	Glu	Ser	Ala	Ala	Tyr	Pro	Gly	Trp	Phe	
			110						115					120	
Leu	Cys	Thr	Val	Pro	Glu	Ala	Asp	Gln	Pro	Val	Arg	Leu	Thr	Gln	
			125						130					135	
Leu	Pro	Glu	Asn	Gly	Gly	Trp	Asn	Ala	Pro	Ile	Thr	Asp	Phe	Tyr	
			140						145					150	
Phe	Gln	Gln	Cys	Asp											
			155												

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

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gcagctgcgc ccatcagctc ccactgcagg cttgacaagt ccaacttcca 200
gcagccctat atcaccaacc gcaccttcac gctggctaag gaggctagct 250
tggctgataa caacacagac gttcgtctca ttggggagaa actgttccac 300
ggagtcagta tgagtgcgcg ctgctatctg atgaagcagg tgctgaactt 350
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gaaggacaca gtgaaaaagc ttggagagag ttgagagatc aaagcaattg 550

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<210> 154

<211> 179

<212> PRT

<213> Homo Sapien

<400> 154

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Leu	Ala	Thr	Ser	Cys	Leu	Leu	Leu	Leu	Ala	Leu	Leu	Val	Gln	Gly
				20					25					30
Gly	Ala	Ala	Ala	Pro	Ile	Ser	Ser	His	Cys	Arg	Leu	Asp	Lys	Ser
				35					40					45
Asn	Phe	Gln	Gln	Pro	Tyr	Ile	Thr	Asn	Arg	Thr	Phe	Met	Leu	Ala
				50					55					60
Lys	Glu	Ala	Ser	Leu	Ala	Asp	Asn	Asn	Thr	Asp	Val	Arg	Leu	Ile
				65					70					75
Gly	Glu	Lys	Leu	Phe	His	Gly	Val	Ser	Met	Ser	Glu	Arg	Cys	Tyr
				80					85					90
Leu	Met	Lys	Gln	Val	Leu	Asn	Phe	Thr	Leu	Glu	Glu	Val	Leu	Phe
				95					100					105
Pro	Gln	Ser	Asp	Arg	Phe	Gln	Pro	Tyr	Met	Gln	Glu	Val	Val	Pro
				110					115					120

Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu
				125					130					135
Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp
				140					145					150
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly
				155					160					165
Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile	
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<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

<400> 155

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agggagagga gcagagatgc tgctgagggt ggagggaggc caagctgcca 200
ggtttggggc tgggggccaa gtggagttag aaactgggat cccaggggga 250
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gcattctgc acattttgaa aagagcagct gctgcttagg gccgccggaa 1000

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 tactttgggt gcattctagt gtagttacta gtcttttgac atggatgatt 1250
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<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser
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Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr
			20						25					30
His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln
			35						40					45
Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro
			50						55					60
Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg
			65						70					75
Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp
			80						85					90
Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu
			95						100					105
Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr
			110						115					120
Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His
			125						130					135
Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly
			140						145					150
Thr	His	Lys	Gly	Tyr	Cys	Leu	Glu	Arg	Arg	Leu	Tyr	Arg	Val	Ser
			155						160					165
Leu	Ala	Cys	Val	Cys	Val	Arg	Pro	Arg	Val	Met	Gly			
			170						175					

<210> 157
<211> 1515
<212> DNA
<213> Homo Sapien

<400> 157
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tgctgctcct tgtag 1515

<210> 158

<211> 502

<212> PRT

<213> Homo Sapien

<400> 158

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Val	Pro	Arg	Glu	Pro	Thr	Val	Gln	Cys	Gly	Ser	Glu	Thr	Gly	Pro	
				20					25					30	
Ser	Pro	Glu	Trp	Met	Leu	Gln	His	Asp	Leu	Ile	Pro	Gly	Asp	Leu	
				35					40					45	
Arg	Asp	Leu	Arg	Val	Glu	Pro	Val	Thr	Thr	Ser	Val	Ala	Thr	Gly	
				50					55					60	
Asp	Tyr	Ser	Ile	Leu	Met	Asn	Val	Ser	Trp	Val	Leu	Arg	Ala	Asp	
				65					70					75	
Ala	Ser	Ile	Arg	Leu	Leu	Lys	Ala	Thr	Lys	Ile	Cys	Val	Thr	Gly	
				80					85					90	
Lys	Ser	Asn	Phe	Gln	Ser	Tyr	Ser	Cys	Val	Arg	Cys	Asn	Tyr	Thr	
				95					100					105	
Glu	Ala	Phe	Gln	Thr	Gln	Thr	Arg	Pro	Ser	Gly	Gly	Lys	Trp	Thr	
				110					115					120	
Phe	Ser	Tyr	Ile	Gly	Phe	Pro	Val	Glu	Leu	Asn	Thr	Val	Tyr	Phe	
				125					130					135	
Ile	Gly	Ala	His	Asn	Ile	Pro	Asn	Ala	Asn	Met	Asn	Glu	Asp	Gly	
				140					145					150	
Pro	Ser	Met	Ser	Val	Asn	Phe	Thr	Ser	Pro	Gly	Cys	Leu	Asp	His	
				155					160					165	
Ile	Met	Lys	Tyr	Lys	Lys	Lys	Cys	Val	Lys	Ala	Gly	Ser	Leu	Trp	
				170					175					180	
Asp	Pro	Asn	Ile	Thr	Ala	Cys	Lys	Lys	Asn	Glu	Glu	Thr	Val	Glu	
				185					190					195	
Val	Asn	Phe	Thr	Thr	Thr	Pro	Leu	Gly	Asn	Arg	Tyr	Met	Ala	Leu	

200										205					210				
Ile	Gln	His	Ser	Thr	Ile	Ile	Gly	Phe	Ser	Gln	Val	Phe	Glu	Pro					
				215					220					225					
His	Gln	Lys	Lys	Gln	Thr	Arg	Ala	Ser	Val	Val	Ile	Pro	Val	Thr					
				230					235					240					
Gly	Asp	Ser	Glu	Gly	Ala	Thr	Val	Gln	Leu	Thr	Pro	Tyr	Phe	Pro					
				245					250					255					
Thr	Cys	Gly	Ser	Asp	Cys	Ile	Arg	His	Lys	Gly	Thr	Val	Val	Leu					
				260					265					270					
Cys	Pro	Gln	Thr	Gly	Val	Pro	Phe	Pro	Leu	Asp	Asn	Asn	Lys	Ser					
				275					280					285					
Lys	Pro	Gly	Gly	Trp	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Val					
				290					295					300					
Ala	Thr	Trp	Val	Leu	Val	Ala	Gly	Ile	Tyr	Leu	Met	Trp	Arg	His					
				305					310					315					
Glu	Arg	Ile	Lys	Lys	Thr	Ser	Phe	Ser	Thr	Thr	Thr	Leu	Leu	Pro					
				320					325					330					
Pro	Ile	Lys	Val	Leu	Val	Val	Tyr	Pro	Ser	Glu	Ile	Cys	Phe	His					
				335					340					345					
His	Thr	Ile	Cys	Tyr	Phe	Thr	Glu	Phe	Leu	Gln	Asn	His	Cys	Arg					
				350					355					360					
Ser	Glu	Val	Ile	Leu	Glu	Lys	Trp	Gln	Lys	Lys	Lys	Ile	Ala	Glu					
				365					370					375					
Met	Gly	Pro	Val	Gln	Trp	Leu	Ala	Thr	Gln	Lys	Lys	Ala	Ala	Asp					
				380					385					390					
Lys	Val	Val	Phe	Leu	Leu	Ser	Asn	Asp	Val	Asn	Ser	Val	Cys	Asp					
				395					400					405					
Gly	Thr	Cys	Gly	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Glu	Asn	Ser	Gln					
				410					415					420					
Asp	Leu	Phe	Pro	Leu	Ala	Phe	Asn	Leu	Phe	Cys	Ser	Asp	Leu	Arg					
				425					430					435					
Ser	Gln	Ile	His	Leu	His	Lys	Tyr	Val	Val	Val	Tyr	Phe	Arg	Glu					
				440					445					450					
Ile	Asp	Thr	Lys	Asp	Asp	Tyr	Asn	Ala	Leu	Ser	Val	Cys	Pro	Lys					
				455					460					465					
Tyr	His	Leu	Met	Lys	Asp	Ala	Thr	Ala	Phe	Cys	Ala	Glu	Leu	Leu					
				470					475					480					
His	Val	Lys	Gln	Gln	Val	Ser	Ala	Gly	Lys	Arg	Ser	Gln	Ala	Cys					

485

490

495

His Asp Gly Cys Cys Ser Leu
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<210> 159

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

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caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
cctccccctg gaattacact gtcacttggg accccaaccg gtaccctctg 300
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tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450
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gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met	Thr	Val	Lys	Thr	Leu	His	Gly	Pro	Ala	Met	Val	Lys	Tyr	Leu
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Leu	Leu	Ser	Ile	Leu	Gly	Leu	Ala	Phe	Leu	Ser	Glu	Ala	Ala	Ala
				20					25					30
Arg	Lys	Ile	Pro	Lys	Val	Gly	His	Thr	Phe	Phe	Gln	Lys	Pro	Glu
				35					40					45
Ser	Cys	Pro	Pro	Val	Pro	Gly	Gly	Ser	Met	Lys	Leu	Asp	Ile	Gly
				50					55					60
Ile	Ile	Asn	Glu	Asn	Gln	Arg	Val	Ser	Met	Ser	Arg	Asn	Ile	Glu
				65					70					75
Ser	Arg	Ser	Thr	Ser	Pro	Trp	Asn	Tyr	Thr	Val	Thr	Trp	Asp	Pro
				80					85					90

Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu
				95					100					105
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser
			110						115					120
Val	Pro	Ile	Gln	Gln	Glu	Thr	Leu	Val	Val	Arg	Arg	Lys	His	Gln
			125						130					135
Gly	Cys	Ser	Val	Ser	Phe	Gln	Leu	Glu	Lys	Val	Leu	Val	Thr	Val
			140						145					150
Gly	Cys	Thr	Cys	Val	Thr	Pro	Val	Ile	His	His	Val	Gln		
			155						160					

<210> 161
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 161
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<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met	Pro	Val	Pro	Trp	Phe	Leu	Leu	Ser	Leu	Ala	Leu	Gly	Arg	Ser
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Pro	Val	Val	Leu	Ser	Leu	Glu	Arg	Leu	Val	Gly	Pro	Gln	Asp	Ala
			20						25					30

Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp
			35						40					45

Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val
			50						55					60

Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln
			65						70					75

Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu
			80						85					90

Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe
			95						100					105

Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser
			110						115					120

Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala
			125						130					135

Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln
			140						145					150

Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala
			155						160					165

Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg
			170						175					180

Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro
			185						190					195

Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu
			200						205					210

Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn
			215						220					225

Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr
			230						235					240

Gly	Pro	Gln	Ile	Ile	Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	245		250		255
Leu Cys Ile Gln Val Trp Pro Leu Glu	260	Pro Asp Ser Val Arg Thr	265		270
Asn Ile Cys Pro Phe Arg Glu Asp Pro	275	Arg Ala His Gln Asn Leu	280		285
Trp Gln Ala Ala Arg Leu Arg Leu Leu	290	Thr Leu Gln Ser Trp Leu	295		300
Leu Asp Ala Pro Cys Ser Leu Pro Ala	305	Glu Ala Ala Leu Cys Trp	310		315
Arg Ala Pro Gly Gly Asp Pro Cys Gln	320	Pro Leu Val Pro Pro Leu	325		330
Ser Trp Glu Asn Val Thr Val Asp Lys	335	Val Leu Glu Phe Pro Leu	340		345
Leu Lys Gly His Pro Asn Leu Cys Val	350	Gln Val Asn Ser Ser Glu	355		360
Lys Leu Gln Leu Gln Glu Cys Leu Trp	365	Ala Asp Ser Leu Gly Pro	370		375
Leu Lys Asp Asp Val Leu Leu Leu Glu	380	Thr Arg Gly Pro Gln Asp	385		390
Asn Arg Ser Leu Cys Ala Leu Glu Pro	395	Ser Gly Cys Thr Ser Leu	400		405
Pro Ser Lys Ala Ser Thr Arg Ala Ala	410	Arg Leu Gly Glu Tyr Leu	415		420
Leu Gln Asp Leu Gln Ser Gly Gln Cys	425	Leu Gln Leu Trp Asp Asp	430		435
Asp Leu Gly Ala Leu Trp Ala Cys Pro	440	Met Asp Lys Tyr Ile His	445		450
Lys Arg Trp Ala Leu Val Trp Leu Ala	455	Cys Leu Leu Phe Ala Ala	460		465
Ala Leu Ser Leu Ile Leu Leu Leu Lys	470	Lys Asp His Ala Lys Gly	475		480
Trp Leu Arg Leu Leu Lys Gln Asp Val	485	Arg Ser Gly Ala Ala Ala	490		495
Arg Gly Arg Ala Ala Leu Leu Leu Tyr	500	Ser Ala Asp Asp Ser Gly	505		510
Phe Glu Arg Leu Val Gly Ala Leu Ala	515	Ser Ala Leu Cys Gln Leu	520		525
Pro Leu Arg Val Ala Val Asp Leu Trp		Ser Arg Arg Glu Leu Ser			

530	535	540
Ala Gln Gly Pro Val Ala Trp Phe His	Ala Gln Arg Arg Gln Thr	
545	550	555
Leu Gln Glu Gly Gly Val Val Val Leu	Leu Phe Ser Pro Gly Ala	
560	565	570
Val Ala Leu Cys Ser Glu Trp Leu Gln	Asp Gly Val Ser Gly Pro	
575	580	585
Gly Ala His Gly Pro His Asp Ala Phe	Arg Ala Ser Leu Ser Cys	
590	595	600
Val Leu Pro Asp Phe Leu Gln Gly Arg	Ala Pro Gly Ser Tyr Val	
605	610	615
Gly Ala Cys Phe Asp Arg Leu Leu His	Pro Asp Ala Val Pro Ala	
620	625	630
Leu Phe Arg Thr Val Pro Val Phe Thr	Leu Pro Ser Gln Leu Pro	
635	640	645
Asp Phe Leu Gly Ala Leu Gln Gln Pro	Arg Ala Pro Arg Ser Gly	
650	655	660
Arg Leu Gln Glu Arg Ala Glu Gln Val	Ser Arg Ala Leu Gln Pro	
665	670	675
Ala Leu Asp Ser Tyr Phe His Pro Pro	Gly Thr Pro Ala Pro Gly	
680	685	690
Arg Gly Val Gly Pro Gly Ala Gly Pro	Gly Ala Gly Asp Gly Thr	
695	700	705

<210> 163

<211> 2478

<212> DNA

<213> Homo Sapien

<400> 163

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<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

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Gln	Ser	Ser	Asn	Phe	Glu	Asn	Ile	Leu	Thr	Trp	Asp	Ser	Gly	Pro	35	40	45	
Glu	Gly	Thr	Pro	Asp	Thr	Val	Tyr	Ser	Ile	Glu	Tyr	Lys	Thr	Tyr	50	55	60	
Gly	Glu	Arg	Asp	Trp	Val	Ala	Lys	Lys	Gly	Cys	Gln	Arg	Ile	Thr	65	70	75	
Arg	Lys	Ser	Cys	Asn	Leu	Thr	Val	Glu	Thr	Gly	Asn	Leu	Thr	Glu	80	85	90	
Leu	Tyr	Tyr	Ala	Arg	Val	Thr	Ala	Val	Ser	Ala	Gly	Gly	Arg	Ser	95	100	105	
Ala	Thr	Lys	Met	Thr	Asp	Arg	Phe	Ser	Ser	Leu	Gln	His	Thr	Thr	110	115	120	
Leu	Lys	Pro	Pro	Asp	Val	Thr	Cys	Ile	Ser	Lys	Val	Arg	Ser	Ile				

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Gln Met Ile Val His Pro Thr Pro Thr	Pro Ile Arg Ala Gly Asp				
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Gly His Arg Leu Thr Leu Glu Asp Ile	Phe His Asp Leu Phe Tyr				
	155		160		165
His Leu Glu Leu Gln Val Asn Arg Thr	Tyr Gln Met His Leu Gly				
	170		175		180
Gly Lys Gln Arg Glu Tyr Glu Phe Phe	Gly Leu Thr Pro Asp Thr				
	185		190		195
Glu Phe Leu Gly Thr Ile Met Ile Cys	Val Pro Thr Trp Ala Lys				
	200		205		210
Glu Ser Ala Pro Tyr Met Cys Arg Val	Lys Thr Leu Pro Asp Arg				
	215		220		225
Thr Trp Thr Tyr Ser Phe Ser Gly Ala	Phe Leu Phe Ser Met Gly				
	230		235		240
Phe Leu Val Ala Val Leu Cys Tyr Leu	Ser Tyr Arg Tyr Val Thr				
	245		250		255
Lys Pro Pro Ala Pro Pro Asn Ser Leu	Asn Val Gln Arg Val Leu				
	260		265		270
Thr Phe Gln Pro Leu Arg Phe Ile Gln	Glu His Val Leu Ile Pro				
	275		280		285
Val Phe Asp Leu Ser Gly Pro Ser Ser	Leu Ala Gln Pro Val Gln				
	290		295		300
Tyr Ser Gln Ile Arg Val Ser Gly Pro	Arg Glu Pro Ala Gly Ala				
	305		310		315
Pro Gln Arg His Ser Leu Ser Glu Ile	Thr Tyr Leu Gly Gln Pro				
	320		325		330
Asp Ile Ser Ile Leu Gln Pro Ser Asn	Val Pro Pro Pro Gln Ile				
	335		340		345
Leu Ser Pro Leu Ser Tyr Ala Pro Asn	Ala Ala Pro Glu Val Gly				
	350		355		360
Pro Pro Ser Tyr Ala Pro Gln Val Thr	Pro Glu Ala Gln Phe Pro				
	365		370		375
Phe Tyr Ala Pro Gln Ala Ile Ser Lys	Val Gln Pro Ser Ser Tyr				
	380		385		390
Ala Pro Gln Ala Thr Pro Asp Ser Trp	Pro Pro Ser Tyr Gly Val				
	395		400		405
Cys Met Glu Gly Ser Gly Lys Asp Ser	Pro Thr Gly Thr Leu Ser				

410	415	420
Ser Pro Lys His	Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro	
425	430	435
Pro Ala Gly Ser	Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val	
440	445	450
Thr Ser Leu Ala	Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His	
455	460	465
Gln Pro Leu Gly	Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val	
470	475	480
Leu His Ser Gly	Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln	
485	490	495
Leu Pro Leu Leu	Ser Ser Val Gln Ile Glu Gly His Pro Met Ser	
500	505	510
Leu Pro Leu Gln	Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln	
515	520	525
Gly Pro Ser Pro	Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys	
530	535	540
Asp Glu Ala Lys	Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln	
545	550	555
Pro Thr Glu Leu	Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val	
560	565	570
Gln Trp Glu Ser		

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
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<210> 166
<211> 303
<212> PRT
<213> Homo Sapien

<400> 166
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Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met
35 40 45
Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
50 55 60
Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr
65 70 75
Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
80 85 90
Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
95 100 105
His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
110 115 120

Asp Phe Val Cys	Phe Glu Gly Gly Arg	Asp Asp Phe Asn Ser Tyr
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Asn Val Glu Glu	Leu Leu Gly Ser Leu	Glu Leu Glu Asp Ser Val
140	145	150
Pro Glu Glu Ser	Lys Lys Ala Glu Glu	Val Ser Gln His Arg Glu
155	160	165
Lys Ser Pro Glu	Glu Ser Arg Gly Arg	Glu Leu Asp Pro Val Pro
170	175	180
Glu Pro Glu Ala	Phe Arg Ala Asp Ser	Glu Asp Gly Glu Gly Ala
185	190	195
Phe Ser Glu Ser	Thr Glu Gly Leu Gln	Gly Gln Pro Ser Ala Gln
200	205	210
Glu Ser His Pro	His Thr Ser Gly Pro	Ala Ala Asn Ala Gln Gly
215	220	225
Val Gln Ser Ser	Leu Asp Thr Phe Glu	Glu Ile Leu His Asp Lys
230	235	240
Leu Lys Val Pro	Gly Ser Glu Ser Arg	Thr Gly Asn Ser Ser Pro
245	250	255
Ala Ser Val Glu	Arg Glu Lys Thr Asp	Ala Tyr Lys Val Leu Lys
260	265	270
Thr Glu Met Ser	Gln Arg Gly Ser Gly	Gln Cys Val Ile His Tyr
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Ser Lys Gly Phe	Arg Trp His Gln Asn	Leu Ser Leu Phe Tyr Lys
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Asp Cys Phe

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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<210> 168

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

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				20					25					30
Cys	Phe	Ala	Asp	Phe	Lys	His	Pro	Cys	Tyr	Lys	Met	Ala	Tyr	Phe
				35					40					45
His	Glu	Leu	Ser	Ser	Arg	Val	Ser	Phe	Gln	Glu	Ala	Arg	Leu	Ala
				50					55					60
Cys	Glu	Ser	Glu	Gly	Gly	Val	Leu	Leu	Ser	Leu	Glu	Asn	Glu	Ala
				65					70					75
Glu	Gln	Lys	Leu	Ile	Glu	Ser	Met	Leu	Gln	Asn	Leu	Thr	Lys	Pro
				80					85					90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg	95	100	105
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln	110	115	120
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp	125	130	135
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln	140	145	150
Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp	155	160	165
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr	170	175	180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu	185	190	195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu	200	205	210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile	215	220	225
Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe	230	235	240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn	245	250	255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly	260	265	270

Met Glu Val

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169

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<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

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